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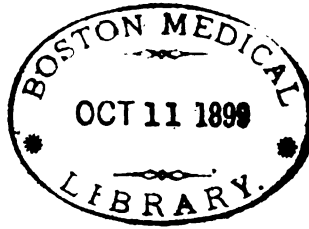
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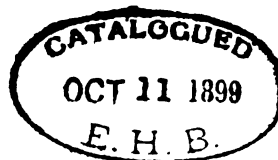
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HYSTERIA IN CHILDREN.

By N. P. Barnes, M.D.,

Washington, D. C.

READ BEFORE THE WASHINGTON MEDICAL AND SURGICAL SOCIETY, DECEMBER 5, 1898.

THIS subject a century ago would have aroused considerable unfavorable comment, if not decided ridicule, from the learned profession, and even at this date is looked upon by some physicians with suspicion.

Hysteria as regarded by the ancients, an affection resulting from the mobility of the sterile uterus, could hardly be expected to be found in children and men, and, in fact, the condition was so regarded and linked with Pluto's agents direct from the region of the damned that for a long time it was a thing separate and apart from scientific medicine, and served for the wonder-working of charlatans.

Going back to the writings of Moses we find the practice of medicine confined to the Egyptian priests, whose occupation consisted in impressing upon the ignorant, superstitious and infantile minds the power they had over nature. The more expert these men were in working the charms or of evoking spirits the greater the doctor. A Herman or Kellar in those days would have been the same as a Halsted or Kelly in these days.

With our present understanding of the etiological factors of this nervous condition the name hysteria is most unsuitable and inappropriate, but custom makes people do ridiculous things even in medicine, and while neurosis or neurotica

would be a better term, it will necessarily be a long time before the name hysteria is dropped from the medical vocabulary.

Among the first to recognize the condition in men was Dr. Thomas Sydenham of London. In a letter written in 1680 he mentions an important symptom not brought out in all of our modern works. "Among all the symptoms," he says, "that accompany this disease this is the most proper and almost inseparable, viz., an urine as clear as rock water, and this hysterick women evacuate plentifully, which I find by enquiry is in almost all the pathognomonick signs of this disease which we call hysterick in women and hypochondriack in men." In another place he speaks of the disease in "young virgins that have the green sickness."

In this country hysteria for a time was associated to a greater or less extent with witchery and spiritual manifestations, and was, therefore, out of the domain of medicine. The first mention of the condition in children was in a New England paper in 1688, mentioned in Dr. Hammond's work on spiritualism and quoted as follows:

"Four children of John Goodwin of Boston, remarkable for their piety, honesty and industry, were in the year 1688 made the subjects of witchcraft. The eldest, a girl about thirteen years old, had a dispute about some linen that was missing with a laundress, whose mother, a scandalous Irishwoman of the neighborhood, applied some abusive language to the child. The latter was at once taken with 'odd' fits, which carried in them something diabolical. Soon afterward the other children, a girl and two boys, became similarly affected. Sometimes

they were deaf, sometimes they were blind, sometimes dumb, and sometimes all of these. Their tongues would be drawn down their throats and then pulled out on their chins to a prodigious length. Their mouths were often open to such an extent that their jaws were distorted and were then suddenly closed with a snap like that of a spring lock. The like took place with their shoulders, elbows, wrists and other joints. They would then lie in a benumbed condition and be drawn together like those tied neck and heels, and presently be stretched out and then be drawn back enormously. They made piteous outcries that they were cut with knives and struck blows, and the plain prints of the wounds were seen upon them. At times their necks were rendered so limber that the bones could not be felt, and again they were so stiff that they could not be bent by any degree of force."

The next mentioning of this condition in children was by Rev. Davidson, the cases occurring at the Kentucky camp-meetings in 1800. He related that "small children had taken part in the religious ceremonies, which consisted in part in the following feats: Simple jerking of the arms from the elbow downward. The head was thrown backward with a celerity that alarmed spectators, causing the hair, if it was long, to crack and snap like the lash of a whip. The children would bounce from place to place like a football, or hop round with head, limbs and trunk twitching and jolting in every direction. Sometimes the head would be twitched right and left to a half-round with such velocity that not a feature could be discerned."

Rev. John Wilkenson deplored the manner of these religious ceremonies, and reported to the *Philadelphia Medical and Physical Journal* in 1805 the epidemics that were occurring in these emotional forms of worship. He writes as follows:

"This disease made its appearance early in the summer of 1803, and increased in its effects with astonishing rapidity until the latter end of that season. I have known some persons as young as six or seven years of age and others, I think, upward of sixty affected. There

is scarcely one girl in ten between the age of ten to twenty that has not had, or now has, the exercise. The paroxysms continued from a half to an hour and upward. The agitation consisted in twitching, retching, groaning, jerking and laughing. Premonitory symptoms were: Compression or weight in the chest or about the heart. The motion gives relief. No other complaints of corporeal pains are made. They all agree in asserting that during these exercises the senses remain in full vigor, and that even in their silent exercises they know everything that is passing about them. They also say that their mental faculties during the paroxysms are preternaturally active and strong. When a person is in the silent exercise if a needle or pin be introduced through the skin it will cause no emotion or complaint, but will produce the sensation of pain."

Dr. Edward C. Mann, in his manual of "Psychological Medicine," published 1883, says "nervous affections, and especially hysterical disorders, are very contagious," and cites the following case by way of illustration:

"The inland market town of Pledran, in France, has inhabitants who lead a very primitive mode of life and who are very ignorant, credulous and simple. Any unusual occurrence is attributed to an occult influence. They are under the exclusive control of their curé. Near this town live the Marcet family, in which were seven children a few months ago, said to be 'possessed by spirits.' February 23, 1882, Marie Marcet had a nervous attack, with pain in the head and sickness and hysterical paralysis, lasting four days, and chorea-like movements. They soon ceased and did not appear again until the 21st of April. On the 22d of April the third child, Pierre, aged eleven years, was suddenly attacked, and his attack lasted four hours. Twelve days after he had a second hysterical fit, and since then he has been very nervous, excitable and irritable. On the 23d of April the second daughter, aged thirteen years, had a nervous attack resembling in all points that of her sister. On the 24th the fifth child, aged six years, had an attack of unconsciousness. On the 28th still another, of

four years, showed hysterical symptoms, and finally another child suffered from unmistakable hysteria. This is a very remarkable instance of the contagiousness of nervous affections, as this hysteria major evidently appeared in this family as a small epidemic."

This form of contagious hysteria is seen frequently and is the most common form in children. The sight of a hysterical person will frequently produce the same symptoms in another person of susceptible nervous organization and has a tendency to involve other hysterical persons around. This form has been known to go through a whole ward in a hospital, and may account for many attacks in childhood.

As to the etiological factors, the writer believes heredity plays an important part, regardless of the fact that most of the late writings on the subject are to the contrary. Not that a child inherits hysteria, but that it can inherit a weak, nervous system, one that is excitable, irritable and given to profound nervous impression. There can be no doubt that children of the insane, habitual drunkards and neurotic inherit a weak, nervous organization, and there is such a condition as family degeneration, frequently seen in the last descendants of some celebrities, who are marked with beardless faces, stammering tongues and feeble minds. The degeneracy to struma, cretinism and deafmutism is met with daily. And stigmata and anomalies in generations past frequently make their appearance in today's offspring. Then is it not reasonable that the child will inherit a weak constitution who is born to an anemic, neurotic, broken-down society belle and nervous clubman? It is a well-known fact that emotional or intoxicated parents do affect their offspring.

Location as an etiological factor in hysteria is not often mentioned, but it is generally understood that city life is productive of nervous conditions, and in no city is it so noticeable as in this nation's capital. Here it is more than the active, busy life, as but few are actively engaged; more than the city noises, for they are comparatively few; but far above these

in importance is the location of the city and the atmosphere that is hanging over it—an element most changeable, therefore, most irritating to the nervous system and nearly always depressing instead of invigorating. The condition, however, is not so bad as that district in Ireland mentioned in a paper by Dr. P. M. Luffan, read before the British Medical Association in 1896. He describes the district as about four square miles in extent, having a population of 300, belonging to sixty families, thirty of which have one or more insane, idiotic or neurotic. There are in all twenty-nine insane, seven weak-minded and many neurotic. Heredity and locality here are undoubtedly etiological factors. The doctor further states that in portions of this district cattle fed on the product of these lands lose their horns, horses lose their hoofs, birds have defective bills or none, and the most curious of all is that bread made from corn grown on the land causes the hair and nails of those that eat it to fall.

Mental and physical disturbances are prominent causes of nervous disorders and have their beginning with the existence of the child both intra- and extra-uterine. The unhygienic conditions surrounding the child, and especially the deoxygenized atmosphere the city-born has to breathe, together with the street noises and door-bells, are enough to keep the child irritated. But, to add to this, every relative and friend must dangle the child in the air and poke it in the ribs to keep it from becoming stupified. The anemic mother, or more often the mother who does not want to be bothered, will find it necessary to feed the child unnaturally, and then begins a long course of indigestion and malnutrition. The child manages to get through teething, but the indigestion is kept up with an excess of starches or other bad feeding. The effect upon the nervous system now asserts itself in an irritable and uncontrollable disposition, for which the child is told stories of policemen and evil spirits to frighten him into submission. The child believes everything to be true, and goes to bed frightened with the nurse's ghost stories and fairy tales, only to dream and im-

agine that all sorts of horrid beasts and devils are about him. It is time that these sensational and exciting fables are banished from the nursery. This is the age of inquiry and experiment, a time when the brain is receiving everything as truth; then why not give the child something substantial and useful instead of simply doing something to keep him out of mischief.

Next comes the illy-ventilated and overcrowded schoolroom, with its single standard of teaching, causing an alarming morbidity. With this comes additional duties in music, painting, elocution, the evening parties, the sensational theatricals and other unhealthy mannerisms. Not that the child should be kept out of school, for the want of occupation is productive of more disorders by far; but change the system of teaching to suit the child. No person has ever yet been injured by proper mental and physical labor.

From the preceding it would seem that very few children have a chance to grow strong and healthy, and, indeed, very few escape such conditions as chorea, diabetes, urticaria, hysteria, spasmodic troubles and other nervous disorders.

The symptoms, as in adults, are varied and may simulate any organic lesion of any part of the body. They are mental, sensory-motor, vaso-motor and visceral. These hysterical children usually have a bright appearance, keen imagination and intelligence, are self-conscious and endeavor to attract attention. They are impressionable, laugh and cry readily and exaggerate their sufferings. Boys are usually effeminate, timid, blush readily and prefer feminine games. A child may have a capricious humor or an irritable temper, with screaming fits and destructive tendency. They frequently have hallucinations and night terrors. As to the sensory symptoms, hyperesthesia is more common than anesthesia. Pains or tender spots are generally found on the head, along the spine or joints, but may be found all over the body. The pain may simulate rheumatism or multiple neuritis. Hysterical blindness and deafness have been met with; in several instances always cured by suggestion or hypnotism.

Most any form of paralysis may be met with. It comes on suddenly or gradually or follows traumatism, and may, therefore, be difficult to understand.

It is well to remember that in recent cases the nutrition and electrical reaction of the muscles is normal, that in hemiplegia the tongue is usually spared, that the deformity is greater when being examined, that the muscles atrophy only in long-standing cases from disuse, that under anesthesia the deformity disappears and there is no joint enlargement, no swelling of the soft parts, no signs of inflammation. Tremors, rhythmical movements, local spasms, chorea or convulsions are the forms of clonic contractions, and the latter is a frequent manifestation of hysteria in childhood, and are distinguished from epilepsy on account of the consciousness not being lost, the child being guided by what is said or done in the room. The visceral symptoms are also prominent in children, the globus hystericus, dysphagia, gastralgia, anorexia being met with frequently. The hysterical cough and hiccough are frequent in children, especially the former.

There are many ideas suggested regarding the pathology of hysteria. Dr. Samuel Wilks of Guy's Hospital says: "The explosion of nerve force by an hysterical attack acts as a kind of safety valve, protecting the internal machinery from danger," giving as example the fits of Napoleon, and Byron's observation of how women pour their troubles into their pocket handkerchiefs, while a man slams a door, or, if of better sense, takes a walk (or a drink) and thus gets rid of his extra nerve force. Niemeyer came nearer the right when he said: "There is no doubt but that the morbid excitement of the motor nerves which give rise to hysterical spasms proceeds from the spinal marrow and medulla oblongata." The theory of the movement of the neurons, or rather their protoplasmic processes, the dendrites, seems to account most readily for the nervous phenomena of hysteria.

Applying Ohm's law of the electric current $C.S. = \frac{E.M.F.}{R.}$ to nerve current, $N.C. = \frac{N.F.}{R.}$ we would have similar conditions to remember in each instance. That so long as the battery is in working order, the

zinc, carbon and fluid in good condition, the wire thoroughly insulated and the connections clear and perfect the current passes along readily, but the moment these conditions are unfavorable the current becomes weak or stops. Likewise with the nerve current.

Take from the cell its oxygen, the current stops; let the myaline sheath be worn off, and the current is side-tracked or grounded; injure or corrode the terminal trees, and no peripheral impulse can be received, and cause the dendrites to retract their processes, and impulses are lost in the first cell. In conditions of hysterical paralysis the neurones in the cortex governing the paralyzed part simply retract their processes, so that the end tufts in the cord no longer have normal relation with the spinal neurons. In short, the connection between the cells is broken. Now, as the result of suggestion the paralysis disappears by the re-establishment of the nerve current. In the condition of spasm we have simply a form of motion accounted for by the action of motor cells in any portion, and should these spasms be localized the same law of localization would be applicable as in condition of paralysis.

These convulsive movements can be accounted for, then, by the spasmodic action of the neurons, the inhibiting power of the cortex being lost and the motor cells having no governing power over them, simply run riot until exhausted, then retract their processes, leaving the patient in a state of exhaustion or coma.

In regard to treatment, here, again, is prophylaxes of the most importance. In order that the rising generation may have a more perfect type of nervous organization, see that the mothers are educated in the principles of physiology and psychology; that the children may be placed under proper hygienic conditions, that they may have perfect tranquillity for the development of the mind and body; that physical development be carried along hand in hand with mental development; that all excitement, overpressure and stimulants be avoided; that they keep regular hours and habits and not be made

the center of attraction, with the impression that callers are being entertained by their brightness; that they be disciplined not to yield to emotional impulses, and taught independence. In instances of attack all sympathizing friends should be removed and the child cared for by a nurse of firmness and command. Such tonics and anti-spasmodics may be given as are indicated.

For paralysis the surprise treatment makes miraculous cures or no cures at all, and suggestion and hypnotism are better methods. Gentle and firm commands, gradually using the affected parts more and more each day, has been successful in most cases. Terrin reported eighteen cases, eight of which were under four years of age. He had marked success with hypnotic suggestions, but was obliged to give it up on account of the superstition of the people. Dr. Stone reported an interesting case last year, which in short is as follows: Girl strong and healthy up to eleven years; grew nervous and emaciated; had symptoms of spinal disease; menstruated at thirteen; had dysmenorrhea and neurasthenia and hiccough; finally a jerking of the abdominal muscles, with loss of strength and loss of mobility of back and larger joints. Her ovaries were enlarged and uterus retroflexed. By mere accident she escaped a double oophorectomy, and came to the doctor in a forlorn condition. After numerous consultations the doctor decided to do a mock operation, and while under the anesthetic the joints were masséd; the patient on awakening was warned not to jerk the abdominal muscles or the stitches would be broken. By gentle and firm commands in the form of suggestion, with massage, the girl was able to walk in ten days and made a complete recovery.

So that in short the treatment would be summed up in the following few words: Hygienic surroundings and proper management of the child, rest and isolation, suggestion and hypnotism, drugs as indicated. The earlier the diagnosis and treatment the more favorable the chances for recovery.

GLEANINGS IN THE COURSE OF A LONG PRACTICE.

By Jackson Piper, M.D.

READ BEFORE THE BALTIMORE COUNTY MEDICAL
ASSOCIATION, NOVEMBER 23, 1898.

(Continued from page 167.)

Intermittent Malarial Fever.—While practicing medicine in Taneytown, Md., a man consulted me for recurrent attacks of intermittent malarial fever. His history was that he had followed boating on the Mississippi river until his health had become so impaired by the chills and fever as to force him to return to his home. For a number of years he had been thus affected and had had many doctors and taken many drugs in vain. "As I was just out of an hospital, did I not know of some new remedy?" I answered no, and as he got up to go I recollected of reading in a little book, just then published (1854), an interesting article on the treatment of intermittent fever by diuretics. The title of the book was "Urinary Deposits," by Dr. Golding Bird of London, England. He discovered that in treating rheumatism, complicated with malarial fever, by diuretics that the latter was not only relieved, but cured.

I took the book from its shelf and read him the following: "In ague nothing is more easy than to check the paroxysms by means of antipyretics, especially quinine, and in many cases the patient is really cured by the remedy.

"But anyone who has had an opportunity of seeing much of the effects of marsh miasmata is perfectly well aware that if a patient has been long exposed to their influence, although paroxysms of ague may be for a time checked with quinine or arsenic, the unhealthy state of the blood is not removed.

"The sallow aspect, the depressed health, the visceral engorgement, all indicate that the poison remains in the system and is continuing its work, although its influence has been blunted by our remedies.

"After a time, however, imperfect paroxysms, the 'dumb ague,' as they are often graphically called by the patient, appear again and again, requiring the

antiperiodic to check their further development. This is a common history, and many persons are thus not really absolutely freed from miasmatic poisons for months and years.

"I do not claim," continues Dr. Bird, "for the acetate of potash the virtues of an antiperiodic, but I do unhesitatingly declare it will effect that which quinine and its allies cannot do.

"It will enter the blood, and as a nascent carbonate (possessing a far higher state of chemical tendency than ready-formed carbonate of potash) in the capillary network of the body aids the metamorphosis and excretion of the unhealthy elements of the blood and their consequent elimination by the kidneys.

"When to a person suffering from marsh malaria this drug has been administered to the extent of two drachms in the course of twenty-four hours, largely diluted, and continued for two or three weeks, not only is no injury effected by the remedy, but the most marked benefits are observed to result.

"The patient's skin becomes less dusky, the expression of the face more healthy, the dull aspect of the eyes changed for one of cheerfulness, the engorgement of the liver and spleen lessens and the paroxysms of 'dumb ague' disappear or merely require a few doses of arsenic for their complete cure and thus to effect the complete restoration of the patient.

"Even in recent tertian ague, in which the paroxysms are well marked and even violent, I have hardly ever administered the acetate of potash without observing a diminution in the intensity of the attacks and a considerable prolongation of the intermissions.

"Indeed, when quinine has been administered for the purpose of checking the ague fit the subsequent administration of the acetate will not only prevent a relapse, but greatly improve the patient's general health."

I put up this medicine for the man, giving him a solution containing thirty grains to the dose, to be taken in a tumbler of water and more if he would drink it, and this dose to be repeated every three hours (four doses per day) for three

weeks. In three months the man was well, in six months he had gained thirty pounds, and a year after he told me his attacks had not returned.

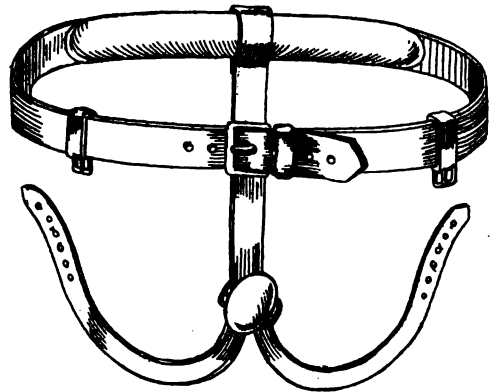
This case made a profound impression on me, and I have since used it in hundreds of cases with unvarying success. I recollect giving it many years ago to Bishop Penick of the Episcopal Mission in Africa. It resulted in curing him—a man thoroughly broken in health by malaria, and when he returned to his work in that pestilential country he took a large supply of the acetate with him. Of course, if the patient is subject to fresh infection he may have a new attack, but never a recurrence of the old.

A Pad for the Treatment of Seminal Weakness.—For many years I have been using a contrivance for the cure of seminal emissions caused by masturbation. The success obtained has been so marked that I desire to call the attention of this association to it. It consists of a padded leather belt, which is fastened around the waist and held in position by a buckle in front. The padded side is, of course, next to the body, and the padding extends from either side of the spine to a short distance beyond the ossa ilii (the hips). From this waistband at the spine falls a perpendicular strap, which strap is made to move freely on the band by a loop made by the strap being doubled on itself. This strap, which I will call the perineal strap, is divided into two parts after it passes the perineum, which parts meet the waistband on either side of the abdomen, and each end is fastened to it by a buckle. These buckles are attached to loops which move easily over the waistband in front. The center or perineal strap is supplied with a pad to which is attached a loop on its back, so as to move easily over the perineal strap. The waistband should be two inches wide. The perineal band, one and one-half inches wide and its divisions after it leaves the perineum, would, of course, be three-quarters of an inch each in width. The pad should be two inches wide by one and one-half inches long. Its upper or perineal surface must be padded firm and hard and made slightly concave. The length of the waistband and the perineal

strap must be determined by actual measurement for the patient for whom it is made.

When in position the pad must fit over the perineum, just at the commencement of the scrotum and between this and the anus. The appliance must be worn continuously and well tightened to keep up a firm pressure by the pad on the perineum. Wherever the appliance hurts the patient the pressure must be eased by wads of raw cotton.

The object of this pressure is to cut off the blood supply to the penis, which supply is often of itself the incentive to self-indulgence, or, if the patient is asleep, this pressure prevents an involuntary emission. The pad also acts, by pressure, as a tonic on the already weakened vesiculæ seminalis and the vas deferens, which together constitute the ejaculatory duct. This apparatus, simple in construction, simple in application and simple in action, does away with other treatment, save, possibly, the use of tonics and nervines, for a constitution already impaired. It absolutely destroys the consummation of erotic desires and tones up the parts and also imparts hope and will power to the patient. I have used it in many cases with perfect success. The apparatus should be worn for months—in fact, until the patient is cured and feels able to trust himself. I claim no originality here, having seen the invention in an ancient number of Braithwait's "Retrospect."



Intussusception of the Bowel.—Some years ago, in the family of Judge Richard Grason, a hearty, stout and active young

girl was taken with what I supposed to be an attack of colic. Her suffering was so intense as to require the aid of several persons to keep her in bed. The vomiting and pain increasing, notwithstanding the use of large doses of morphine, I found on further examination a localized pain in the duodenum. I then pronounced her condition invagination or intussusception of the bowel. Early in the morning Dr. Tiffany was summoned. While waiting for him she grew rapidly worse.

I left the house to look for a pair of bellows, which I luckily found. I introduced a rectal tube some fourteen inches and inserted into the tube the nozzle of the bellows. I pumped in air until she was seized with a sudden desire to defecate. A large operation followed and she was relieved.

The fecal matter voided was firm, and, what was most interesting, there was completely encircling it a narrow ring of blood and mucus, showing, to my mind, the evidence of the stricture.

Dr. Tiffany arrived a short time after. I showed him first the action, and then asked him to examine the patient and locate for me the intussusception. His finger rested on the spot I had marked out.

Another interesting case of a similar character was that of W. H. E. of Towson, a patient of Dr. Massenberg. He had diagnosed the case intussusception, but wished to consult me as to the possibility of sending him to a city hospital for an operation, his condition being one of extreme prostration. He was, when I saw him, having stercoraceous vomiting. We applied the bellows with success. The same uncontrollable desire for an action ensued, but as the fecal matter was soft I saw no evidence of blood and mucus. This was a bad case and made worse by the intemperate habits of the patient.

The rationale of this treatment is that the enforced air acts as a lever or wedge, forcing the dip of the intestine upwards and in position. I will say, in passing, that the question has been raised by an eminent scientist—no less a man than Dr. Robert Koch of Berlin—as to the possibility of forcing air through the ileo-

cecal valve. I wished to ascertain from Dr. Koch the per centum of the sulphur dioxide necessary to destroy the bacillus of cholera. Dr. Sternberg, now the eminent surgeon-general, U. S. army, kindly interviewed him for me and mentioned my proposed treatment of this disease by injecting this gas (sufficiently diluted with atmospheric air) per rectum, so as to reach the habitat of the bacilli in the small intestines. While he approved of the treatment, he thought the valve would prove an insuperable obstacle. I told Dr. Sternberg that in the Grason case I had demonstrated by the sight and by percussion the presence of air in the stomach and intestines and by the happy result of the operation.

Strangulated Hernia.—I acted on one occasion with success on a hint obtained from a characteristic story I heard illustrating the resourceful originality of Dr. Thos. H. Buckler.

For many years he resided in Paris, and, while by the laws of France, he was not admitted to general practice, visiting Americans gladly sought and obtained his professional services.

On one occasion he was invited by several distinguished French surgeons to witness an operation for strangulated hernia. By courtesy he was politely asked to examine the patient, which he did. He then remarked, "If you gentlemen will allow me, I think I can relieve your patient without an operation." They credulously consented. He immediately had summoned two stout men from the street and directed them to seize the patient by either foot and dangle him in the air, head down.

The French doctors protested, but Buckler was firm. The man was elevated, a sudden snap of noise followed, and the bowel "flopped" into position, much to the astonishment of the French gentlemen on the brilliant success of the sturdy, rugged American doctor. I repeated this experiment on a colored youth nineteen years old, living at Banesville. I had used taxis and ice and failed. I then had him suspended. I heard the click of the returning bowel and its succeeding "flop" into the restful bosom of its companions in the darkey's abdomen.

Laryngismus Stridulus.—Laryngismus stridulus, or spasm of the glottis, is a disease of infancy. It most frequently comes on suddenly. There is a complete arrest of respiration. The chest is fixed; the head thrown back; the face, at first pale, quickly becomes cyanotic; the eyes are wide open and staring; muscular twitchings, carpo-pedal spasms; convulsions, and, in severe cases, death. In a book on diseases of children published by Chas. D. Meigs in 1850 he claims as his idea the use of ice applied to the epigastrium and moved over the arch of the hypochondrium. I met with a case at Hampton, a very severe one, which yielded promptly to this simple remedy. This treatment is mentioned in our later works, and I merely refer to it in this paper as a device worth remembering.

Cyanosis.—I will briefly refer to cyanosis, depending upon the non-closure of the foramen ovale. From the ingenious theory advanced by Dr. Meigs in the work referred to, of the admixture of venous and arterial blood through this valve, I have obtained most excellent results by resorting to his method of placing and keeping the child on its right side, at an angle of 30° or more.

I know this view has been hotly contested by subsequent authors, but as seeing is believing I would advise my professional brothers to give Dr. Meigs' method a fair trial until they are satisfied that there exists some cause other than an imperfect foramen.

Interstitial or Chronic Pneumonia.—In conclusion, I will briefly refer to the treatment of interstitial or chronic pneumonia.

When resolution of the lungs is suspended a condition of chronic hepatization remains, which is difficult to remove and which invariably sets up some intercurrent disease, such as tuberculosis, if the patient imbibes its germ, or gangrene of the lung, or the patient succumbs from non-aeration of blood, or the consolidated lung acts as a foreign body.

The free use of iodide of potassium, the syrup of the iodide of iron, cod-liver oil, stimulants, a generous diet and the repeated application of large fly blisters to the affected side will bring about a cure when nothing else will.

Society Reports.

THE CLINICAL SOCIETY OF MARYLAND.

MEETING HELD DECEMBER 2, 1898.

THE meeting was called to order by the vice-president, Dr. B. B. Browne.

Dr. W. T. Watson exhibited a "Case of Cured Pulmonary Tuberculosis."

Through the kindness of my former patron, Mr. Knecht, who is good enough to come here this evening, I am able to present to you a case of pulmonary tuberculosis that was cured by a brief residence in Colorado.

In the spring of 1896 Mr. Knecht had an attack of pneumonia which confined him to the house for a month. He was comparatively well after that until the spring of 1897, when he contracted grippe, the acute symptoms of which lasted for about a week. From this time on he always had a little cough, and in the latter part of July when I saw him he was having a little fever, night sweats and was losing flesh rapidly. An examination of the chest showed a small area of consolidation at the left apex. The sputum was examined by the city bacteriologist, Dr. Stokes, and he reported that it contained tubercle bacilli. I advised the young man to go to Colorado, but, not wishing to assume the full responsibility for this, I had Dr. Chambers see him in consultation, and, as he agreed with me, the patient started in the fall of 1897.

In Denver he put himself in the care of Dr. Axtell, and he found in addition to the consolidation in the left lung a smaller area in the right. Mr. Knecht spent a month in Denver, then a month in Greeley, and finally went to a ranch a few miles south of Denver. He began to do light work about this 4000-acre ranch, such as running errands, doing chores, and, as he became stronger, took up garden work. At the end of four months he had gotten so well that the proprietor of the ranch stopped charging him board and gave him his keep for the work he did, and later added small sums of money to this. In August of this year he went on a thirty days' camping expedition in the Rocky mountains.

On the advice of Dr. Axtell and myself he has lived out of doors as much as possible, and as you see him tonight he does not look much like a consumptive. I have looked him over carefully and cannot find an abnormal sound in the chest. There is no sign of consolidation, and he produces no sputum for examination. He weighed 135 pounds when he left here, and now weighs 150—not a very great gain. He is going back next week to Denver, where he has a position as bookkeeper in a large store.

The consolidation in one lung was found by Dr. Chambers and myself, and later in both lungs by Dr. Axtell, and the bacilli were demonstrated by Dr. Stokes.

I have now on the same ranch that Mr. Knecht came from another young man of nineteen, who came to me on the 22d day of last August after he had been ill for over a year and with a history that his father had died within a few years of tuberculosis. I found quite a large consolidation in the left lung and numerous bacilli in the sputum. He also was having fever and night sweats, and was losing flesh rapidly. He worked for a large transportation company here, and the president had sent him to sea on one of their vessels, but he felt that the trip had done him some harm.

I told him what he had, and that if he could go to Colorado he would probably get well. He replied that he had no means to take such a trip nor to stay there. I knew the gentleman he worked for, and knowing him to be a philanthropist I wrote him a note stating the conditions. He secured transportation for his clerk to Colorado, agreed to continue his salary for six months, and told him to advise him at the end of that time as to his condition. Mr. Knecht reports that he is doing well, and that during the last week of his stay this young man had no night sweats at all, his cough was much better and he seemed to be on the road to health. Dr. Axtell also examined him, and reports to me by letter that he thinks he is going to recover.

The point I want to bring out is this: The young man who is now in Colorado was a poor boy. He had been under the

care of a very reputable physician for the space of a year, and had been told that he had a cold that would wear away in the course of time. I do not for a moment think that the physician did not understand the condition, but he assumed that the boy had no means of going to Colorado and could not be cured. I think we have no right to assume such a thing, but should do everything in our power to secure for such patients the opportunity to visit Colorado or some such health-giving place. I think usually a way to do this will be found if the physicians will bring the case before the patient's friends. Mr. Knecht was a comparatively poor boy, but he managed to go, and has been cured. The expense of the trip to Colorado is something which most of us do not think of, so I have asked Mr. Knecht for a brief statement of it. He states that the fare to Denver, second class, is \$42.50, and west of the Mississippi river that entitles them to a reclining chair, which, with a pillow, makes a comfortable resting place at night. The meals from here to Denver cost \$5. His board in Denver for four weeks cost \$18, in Greeley four weeks \$12, and on the ranch four months \$56. While in Denver he had a small laundry bill, but on the ranch laundry amounted to very little, as they wear negligé shirts. His tour in the mountains cost \$15 as his share of the camping outfit. His total expenses were \$107—a very trifling amount to give for one man's life. Counting at the rates above given, it would cost \$220 to go and stay a year, and I think a great many young men who have tuberculosis and not much money can raise that amount in some way. Perhaps some wealthy men could be found who would loan them the money on the proper agreement to pay it back with interest, and they would thus secure their health, whereas here they must die.

Dr. Horace M. Simmons then read a paper entitled "Medical Journalism in Maryland (see page 101).

Dr. William Lee Howard: I have been quite interested in this paper, for I have had more or less experience in journalism. Journals stand as the signs of the enterprise and homogeneity of the community. I think it is the duty and it

ought to be the personal pride of every man in the State to take the MARYLAND MEDICAL JOURNAL. Just as sure as every man takes the JOURNAL it will improve.

Dr. W. J. Todd: Every man in Maryland should be a subscriber to his State paper. There are many advantages that may accrue to the subscriber from reading his local paper, for the chances are that he knows the authors of the articles therein and they are more valuable on that account. Then, too, he learns what the different medical men are doing, and can keep track of the changes that are taking place in his State. I would appeal for the support of all medical men for their home journal as a matter of personal pride.

Dr. A. K. Bond then said: I have given my views to the editor a number of times when we were discussing these questions. The first point that interests us is that of personal subscription. The JOURNAL is much better now than when I was editor of it, and I think we ought to try to get our friends to take an interest in it. The second matter is that of contributions to its columns. A journal of that size ought not to have long articles spread out page after page, but we should send them short papers, so that they can have three or four original articles in each issue. If a man has anything to say he can say it in a few minutes, and such a paper wants short articles and a lot of them.

Dr. J. D. Blake: I imagine that the reading of this paper will not accomplish what is wanted, because my impression is that the profession of this State is in a hypnotic condition. I am interested in the MARYLAND MEDICAL JOURNAL, and I endorse all that has been said here. I have sometimes blushed for shame for Maryland. A few years ago we had the American Medical Association here, and the finance committee went to ask our wealthy men to contribute or to open their houses so that we could invite our friends in, but they said no, we cannot do it. We then went to the hotel-keepers, and even the small street-car companies, and made them give us contributions. When we went to Atlanta, Ga., the next year we found the rich men were throwing open their houses to us all day, and

the same thing occurred this year in Denver, where, in a town of only 60,000 people, the profession alone raised \$140,000. The MARYLAND MEDICAL JOURNAL is a first-class journal, and we ought to appreciate its merits.

Dr. W. B. Canfield: While, of course, we are always glad to have subscribers who pay for the JOURNAL when they get it, we also want literary supporters. The great trouble in Baltimore is that men are too busy to write; why, they will not even answer your letters. I send out twenty letters to physicians in Baltimore and get perhaps two replies, and I send twenty letters to busy men elsewhere, and get at least nineteen replies.

Dr. Todd: If the subscribers when they write to advertisers would mention the fact that they read the advertisement in the JOURNAL it would make an impression in favor of the JOURNAL that would perhaps secure it a page ad. in next issue.

Dr. A. D. McConachie: I happen to hold a small amount of stock in the MARYLAND MEDICAL JOURNAL. The JOURNAL requires support. Where will it get it? The men who manage the JOURNAL should make it a part of their business to seek subscribers and to secure good articles for the paper, and these should be had even if they have to pay for them. As a usual thing it is a worthless article that comes gratis.

Dr. Chambers: It is decidedly the best local journal I know of. It has been constantly improving for ten years past, and is equal to any other journal except those backed by large corporations. I think the JOURNAL ought to have reports of all the society meetings, and, though it may cost them something, I believe it would pay. Probably they should have hospital reports. If they would send some one to the resident physicians they could get short, accurate reports of the work going on in the hospitals, and these would be of value to the local profession. The part of the JOURNAL I most enjoy is the local column. There is always something interesting there, and the editor should make more of it. Another feature that might be worth something would consist of short articles from the different counties in the State.

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Medical + Journal.

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MARYLAND MEDICAL JOURNAL,
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WASHINGTON OFFICE:
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*BALTIMORE, JANUARY 7, 1899.

In that excellent journal, the *Gazette des Hôpitaux* (Nos. 111 and 113), is a very thoughtful lecture by M. Mathieu,

Dyspepsia of the Tubercular. in which this subject is considered. Taking the ground that, in the tubercular, hygiene, including alimentation, is now considered more important than drug medication, he proceeds to consider in order the emesis of the tubercular, their early and later dyspepsias, their want of appetite and the treatment for these conditions.

Finding constantly in dyspeptics who cough only after eating, till they vomit, a sensitiveness on pressure upon the solar plexus (at the point where a line between the ninth ribs crosses the linea alba), he reasoned that this cough is a reflex carried from the stomach by an over-sensitive solar plexus up the pneumogastric to the nerves of the respiratory tract. He attempted to lessen this sensitiveness of the stomach nerves by causing pellets of ice to be swallowed whole at intervals for half an hour after meals, by the use of chloroform water, bromoform water or menthol, in broken doses after meals. By one or other of these agents he checks the cough and its resultant vomiting.

It is always to be remembered that the doctor may himself promote the tuberculosis by giving drugs which gradually disorder the stomach; also, that a strong appetite may occur with feeble or unwholesome digestion.

A tuberculosis may conceal itself for a considerable time under its dyspeptic phenomena, which in turn, by lowering the nutrition of the patient, accelerate the progress of the tuberculosis. This dyspepsia gives uncertain chemical tests, and is associated not with ulceration, but with change and atrophy of the digestive glands of the stomach, and either tardy propulsion of the food or dilatation may be present. It demands the usual treatment for such conditions, with the caution that, while irritation of the stomach by wrong feeding is to be avoided, the tubercular patient needs nutriment more than the mere dyspeptic—digestible amounts of nutritious articles at two or three hours' interval.

Want of appetite is a consequence, as well as a cause, of insufficient nutrition, and does not necessarily indicate feeble digestive powers. A careful exposition of this fact may lead some patients to very abundant ingestion of milk, egg, meat powder, etc. In others, life in the open air, or calumba and gentian tinctures with hydrochloric acid an hour after meals, may improve the appetite, or tube-feeding may be necessary. The invigorated body may conquer the disease.

* * *

Too much stress cannot be laid at this time on the necessity of seeing that all the unprotected are properly protected

Vaccination. by vaccination. Not only have cases of virulent smallpox been reported sporadically in parts of many States, but the disease has been quite a menace in some of our newly-acquired territory. When a dangerous disease breaks out in any community the short-sighted usually wish to keep the fact secret on the plea that it will hurt business, when it should be seen that an epidemic may follow which would do incalculable harm, besides causing a large mortality. In smallpox, however, no secrecy should be observed under any circumstances, for if all unprotected are vaccinated early the disease dies out through want of material. The physician should see to it that vaccination is done, and the vaccine physicians should actually do their work and protect the poor and others who would not help themselves.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending December 31, 1898:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	..	..
La Grippe.....	3	36
Pneumonia.....	..	55
Phthisis Pulmonalis.....	1	17
Measles.....	4	..
Whooping Cough.....	..	1
Pseudo-Membranous Croup and Diphtheria. }	41	9
Mumps.....	..	..
Scarlet Fever.....	6	..
Varioloid.....	..	..
Varicella.....	11	..
Typhoid Fever.....	*2	1

* Both Imported.

There is no vacancy in the medical staff of the navy.

Newport News, Va., will have compulsory vaccination.

The public baths in New York are nearly self-supporting.

Dr. Henry B. Thomas has moved his offices to 1007 Cathedral street.

Some physicians advocate charging a fee for referring cases to a specialist.

The United Presbyterian Women's Association intends to erect a hospital at Allegheny, Pa.

Dr. Asa W. Graves of Wolfstown, Madison county, Virginia, is dead at the age of seventy-nine.

Epidemic influenza, which has been working such havoc in New York, is causing some trouble in Baltimore.

The New York Board of Health proposes to prosecute those druggists who may be detected of substituting in prescriptions.

There is an attempt being made in New York to give the drug clerk shorter hours and a ventilated bedroom away from the odor of drugs.

The faculty of the College of Physicians and Surgeons is thinking of establishing a training school for nurses in connection with the hospital.

Dr. J. G. MacPherson of Brunswick, Md., died suddenly last Wednesday in Baltimore. He was graduated from the University of Maryland in 1880.

Dr. Charles D. Aaron of Detroit gives notice that the next annual meeting of the American Gastro-enterological Association will be held in Washington in May, 1899.

The x-rays have been recently suggested as a means of detecting smugglers, and now it is proposed to use these same means to examine the body in cases of trance, to avoid premature burial.

Professor Behring, together with a Dr. Ruppel, has applied for a German patent for a tuberculosis serum. His claim is: "A method for producing a highly poisonous and immunifying substance from tubercle bacilli or from cultures of tubercle bacilli."

Dr. René du Bois-Reymond, son of the late distinguished physiologist, intends to publish his father's lectures on "The Physics of Organic Metabolism," which have never been printed. Through the newspapers Dr. du Bois-Reymond appeals to former students who have full notes, and particularly those who have shorthand notes, of the course, to place them at his disposal for a time.

According to the Medical News, it has been found that fat people burn more easily than thin, and women who have died in childbirth are most easily cremated, while persons who have died of consumption require more time and more fuel than any other class of cases. These observations were made in Japan, where the fuel used is firewood, placed directly in contact with the body. On an average about seventy-five pounds of wood is required for each complete cremation.

The Third International Congress of Gynecology and Obstetrics will be held at Amsterdam from August 8 to 12, 1899. The following are the questions proposed for discussion; Surgical treatment of fibromyomata, the parts respectively played by antiseptics and perfected technique in the results of modern operative gynecology, the influence of position on the form and dimensions of the pelvis, comparative study of the indications for Cesarean section, symphysiotomy, craniotomy and artificial premature labor.

Washington Notes.

Dr. Isaac W. Brewer, acting assistant surgeon at Washington Barracks, has been ordered to accompany the Twenty-second U. S. I. to Manila.

Maj. Victor C. Vaughn and Maj. Edward I. Shakspeare have been assigned to duty in this city for three months to complete the report of the board of medical officers.

Dr. H. L. E. Johnson will attend the meeting of the board of trustees of the American Medical Association to be held at Chicago next Wednesday. There is strong probability that Dr. Johnson will be elected editor of the journal.

A large number of officers appointed for the Spanish war are still carried on the rolls, but will be gradually dropped, and will all be retired by May 1. Since the peace protocol the Department has discharged 116 passed assistant surgeons and thirty-nine assistant surgeons.

There is a general demand for warm street cars by the citizens of the District, and there is no doubt that much of our grip and pulmonary troubles are the result of exposure in the unheated and open cars. A summer car is about as much out of place in a zero temperature as a crash suit would be on an arctic expedition.

There were 161 deaths in the District the past week—an annual death rate of 29.82 per 1000. There were thirty-eight deaths from acute lung complaints, of which twenty-five were pneumonia. The mortality from la grippe was 20, typhoid fever 2 and diphtheria 4. There are seventy-nine cases of diphtheria and 130 cases of scarlet fever in quarantine.

The annual report of Dr. Woodward, the health officer, shows that during the year there were 5415 deaths in the District. Of the decedents, 2973 were white and 2442 colored, the rate being 15.53 per 1000 for whites and 27.51 for colored, a total of 19.32 for entire population—the lowest death-rate ever recorded in the District. It is gratifying to note the decrease in number of deaths from diarrheal diseases. The death-rate for 1895-96 was 2.78; 1896-97, 2.00; 1897-98, 1.75. The death-rate from tubercular diseases was 3.42, the number of deaths being 959. There were 437 cases of scarlet fever. Of all cases, 2.9 per cent. died—

of the white 2.7 per cent., and of the colored 5.9 per cent. The number of cases of diphtheria was 700, of which 494 were among the whites, and of these 67 died, showing a morbidity rate of 2.52 per 1000, and a percentage of fatal cases amounting to 13.5. Among the colored there were 206 cases, with 64 deaths, percentage of fatal cases being 31.1, the mortality of all cases, then, being 18.17 per cent. There were 4909 births, 2737 white and 1972 colored. Of the children born, 2444 were males and 2265 females. Six hundred and fourteen were illegitimate, 96 white and 518 colored. Twins were born in 54 cases, 32 white and 22 colored.

Book Reviews.

A MANUAL OF MODERN SURGERY, GENERAL AND OPERATIVE. By John Chalmers DaCosta, M.D., Clinical Professor of Surgery, Jefferson Medical College, Philadelphia; Surgeon to the Philadelphia Hospital, etc. With 336 illustrations. Philadelphia: W. B. Saunders, 925 Walnut street. 1898.

In 1894 Dr. DaCosta published a manual of surgery, which, according to his preface, was intended to occupy a position intermediate "between the complete but cumbersome text-book and the incomplete but concentrated compend." This little book appears to have met with a favorable reception, as a second and much more complete edition has recently come from the press. The present edition has been much altered from the first, many new sections having been introduced and others rewritten; indeed, the subject-matter is very fresh and has been brought quite up to date. The book is in no sense a compend, though it is condensed, as it is impossible to treat exhaustively the whole subject of surgery in 900 rather small pages. Beginning with bacteriology, asepsis and antiseptics, the student is prepared for the study of inflammation and its complications, infections, wounds, tumors and the various injuries and diseases of the different organs and regions of the body. The various operative and mechanical methods of treatment are also described. In short, we believe the book to be a reliable and safe, but not exhaustive, treatise on surgery, and as such can commend it to students and practitioners. Price, cloth \$4; half morocco, \$5 net.

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Original Articles.

GONOCOCCUS NEISSER.

By Henry Alfred Robbins, M.D.,

President of the Washington Microscopical Society.

READ BEFORE THE SOCIETY ON DECEMBER 18, 1898.

SIR SAMUEL WILKS, president of the Royal College of Physicians, England, in a lecture on "Medical Treatment," delivered many years ago, made a statement that new inventions always led to new discoveries. Sir Samuel was indeed a prophet and most properly named. With great modesty the president of the Royal College of Physicians stated recently that there had been only three great men of the name of Samuel, viz., the prophet, Dr. Samuel Johnson and Samuel Weller, Jr.

It was in 1859 that Virchow, with a lens of low power, detected in the muscles of the human body the trichina spiralis. According to Hebra the acarus scabiei vel sarcoptes hominis was discovered by Danielssen and Boeck of Norway. Dr. Anderson gives the credit to a maker of microscopical preparations in Paris, named Bourgogne. The French give the credit to M. Languetin, a student of St. Louis Hospital, Paris. The Germans give the credit to both Kraemer and Eichstadt.

For many years the microscope was used to detect urinary casts, pus cells and blood corpuscles, and but comparatively few medical men possessed one. In this country you might say that the microscope was a toy until men like Colonel Woodward of the army became interested in the subject. I do not know whether General Sternberg, the honored head of the Medical Department, U. S. A., was a co-laborer of Dr. Woodward or not, but we all know that the science of bacteriology has been as much advanced by him as anyone, perhaps, excepting Robert Koch.

It was not until the immersion lens was invented that we heard of the bacteriologist, with his culture tubes and staining fluids. Then discovery after discovery was announced, and we began to realize that almost every disease is of germ origin. It would take more time and space than I am allowed to go over the whole subject. In this country General Sternberg has the credit of being the first to discover the micro-organism of croupous pneumonia. We are all familiar with the work of Lord Lister and Robert Koch, Klebs and Loeffler, Eberth, Laveran and many others who are devoting their time to the science of bacteriology.

Professor Neisser of Breslau, following Koch's improved method of staining, discovered the specific microbe of gonorrhea in the year 1879, and now it is known all over the world by the name he gave it—gonococcus, or, rather, gonococcus Neisser. He described the micro-organism as a diplococcus which differed from the other varieties of this species of parasites in being always found in clumps of from ten to twenty, surrounded by a mucous envelope.

It is my purpose to present facts relating to the damage and death of innocent victims and also the vicious, caused by this microbe, which was brought to light by Neisser.

In 1881 Professor Haab demonstrated that the micro-organism found in gonorrheal pus and the secretion of purulent ophthalmia are identical. According to his observations they are always present in the secretions of purulent ophthalmia and that they are never found in the simple inflammatory or catarrhal form. Other prominent German ophthalmologists, including Sattler, Lebert and Hirschberg, recognize the gonococcus Neisser as the specific cause of gonorrhea and its identity with the coccus found in specific purulent ophthalmia.

Dr. Oppenheimer, in discussing a

paper of Dr. E. Adams on "Cases of Ophthalmia Neonatorum," read before the Alumni Society of the Charity Hospital February 10, 1897, stated with emphasis that "it was ignorance which caused most cases of ophthalmia neonatorum. It was often the ignorance of the midwife. He did not know of a paper that could have touched a subject of more vital importance than this, when we come to consider that in Germany and Austria a third of all the cases of blindness was traced to this source. In all Europe there were 300,000 blind, and something like 10 per cent. of the blindness was acknowledged to be caused by ophthalmia neonatorum." According to that there were 30,000 people who were blind from preventable causes, always, or nearly always, arising from ignorance of the parents or midwives.

Dr. Lucian Howe, superintendent of the Batavia School for the Blind, in a letter to the editor of the *New York Medical Journal*, February 19, 1896, states as follows:

"Sir—I notice in the *Journal* for February 8 I am quoted as saying that after a thorough examination of the inmates of the School for the Blind at Batavia it was found that 22 per cent. had no right to be there. As one or two have called my attention to this paragraph as a reflection upon one of the best institutions in the State, it is only right to say what was explained in the passage quoted, that this 22 per cent. represents the inmates of the school who are there because of having suffered from purulent ophthalmia of infancy. As this is now recognized as practically a preventable disease our committee, whose report seemed worthy of notice, simply wished to lay stress on the fact that so large a proportion of blind were at the school not because of any fault of the institution, but because of improper care which these inmates received in infancy, or, more probably, because of the lack of proper legislation then, which compels nurses now to report such cases promptly to a legally qualified practitioner."

Dr. Albert Edwards Wilson of Norfolk reports the case of a pious old gentleman who acquired gonorrheal ophthal-

mia by using a towel that had been previously used by his son, who had an urethral inflammation. He also reported the case of a conductor on a railroad train, who got a cinder in his eye and gave himself gonorrheal ophthalmia from his fingers, which were smeared with his own gonorrheal pus. The same accident occurred to a wagon driver, who was a patient of his.

FLIES AS BEARERS OF INFECTION.

"All observant travelers in Egypt notice an immense amount of eye disease. Blind people abound, and all grades of trachoma and the results of communicable ophthalmia are exceedingly common. From August to November acute ophthalmia is most prevalent. In the conjunctival discharge both gonococci and bacilli occur, occasionally together in the same case. When the bacilli alone are present the disease is of a milder type. Besides the familiar causes—extreme filthiness and direct specific contact—an apparent means of dissemination of the disease is found in the myriads of flies which infest Egypt. These remain undisturbed upon the eyelids of children, feeding upon the conjunctival discharge, according to Fuchs, and then transmit the infection further, especially in the warm weather. Lucian Howe found that if such flies were allowed to walk over the surface of nutrient gelatine bacteria developed wherever their feet had gone. Hirschberg and some other physicians doubt that the flies are in any way the carriers of the infection. Yet the Bedouins of the desert region, where there are comparatively very few flies, present a smaller proportion of eye diseases."—*Wiener Klin. Woch.*, March 22, 1894, p. 211.

From the time of Moses the Egyptians have been cursed with plagues. If they pursue the custom of throwing their "clap rags" to the winds, as was done in this country a few years ago, it is no wonder that the hot climate would cause excellent cultures sufficiently gummy to stick to the feet of flies and all insects. To acquire gonorrheal ophthalmia in this way is no more remarkable than the way an English medical man acquired syphilis, an account of which was published

by the greatest English-speaking syphilographer, Jonathan Hutchinson. The initial lesion was caused by a wicked and utterly depraved flea, which, after biting and drawing blood from one who had constitutional syphilis, had the meanness to bite our *confrère* on the leg when he was riding in an omnibus.

CEREBRAL COMPLICATIONS IN THE COURSE OF GONORRHEA.

Pitres (*Gaz. Hebdom. de Médecine*) observed two instances of the coexistence of acute urethritis and hemiplegia in two patients, one of whom at least was at an age and in a condition of health which rendered very difficult the explanation of hemiplegia from the usual causes. I regret exceedingly that I have not been able to give a report of the cases.

ULCERATIVE GONORRHEAL ENDOCARDITIS.

Ghon and Schlagenhauser (*Wiener Klinische Wochenschrift*, 1898, No. 24; *Journal des Connaissances Médicales*, September 1; Bulletin of the Pasteur Institute, October) report the case of a girl who entered the hospital after having suffered for a month with pains in the limbs, accompanied by symptoms of influenza. Four days before entering the hospital she was seized with chills, which were still present at the time of her admission. Examination showed that she was affected with acute blenorrhagia and Bartholinitis. She had intermittent febrile attacks. About the sixth day pain suddenly appeared in the right foot, which became cold and bluish, while sensitiveness was diminished in the whole limb. This lesion grew worse and five days later the foot was the seat of gangrene. The cardiac sounds, at first muffled, became more distinct, and a systolic murmur was heard at the base on the left of the sternum. The patient's condition became very bad, and death promptly occurred.

At the autopsy the following lesions were observed: An ulcerative endocarditis of the aortic valves, with abscesses in the substance of the myocardium; hypertrophy, and dilatation of the heart. The gangrene of the foot and leg was caused by embolism of the femoral artery. There was a focus of suppuration in the peritoneal covering of the poste-

rior surface of the uterus. The gonococcic process had invaded the urethra, the vagina and the cervix. The liver was the seat of a parenchymatous degeneration; there were myocarditis and pulmonary edema. Gonococci were found in the cardiac lesions; this proved the gonococcic nature of the endocarditis. The authors noted the absence of splenomegalia and septic emboli, which usually accompany infectious endocarditis.

The gonococcus was isolated and cultivated; it could not be found in the embolus of the femoral artery, but was present in large numbers in the retro-uterine abscess.

The urethral canal exhibited numerous small, very vascular vegetations, developed at the expense of the connective tissue underlying the epithelium, which vegetations are often met with in subacute and chronic gonorrhea.

The authors could not find the channel of entrance of the pathogenic microbe into the circulation.

"At a meeting of the Society for Internal Medicine, in Berlin, Dr. Siegheim reported the following interesting case: A woman came to him complaining of great weakness and chills. On examination he found a mitral systolic murmur. The husband confessed to having contracted gonorrhea and cohabited with his wife before being completely cured. Dr. Siegheim made the diagnosis of endocarditis ulcerosa gonorrhoeica. Subsequent events proved the correctness of the diagnosis. The condition of the woman became worse and worse, the pulse became intermittent, murmurs developed over the aorta, blood and pus appeared in the urine, then collapse and death. Upon autopsy microscopical examination of the diseased tissue revealed the presence of gonococci."

A case of endocarditis due to gonorrhea came under the observation of Michaelis. A man, twenty-five years of age, in the third week of an attack of acute gonorrhea, was seized with severe rheumatic pains in the finger joints. The metacarpal-phalangeal joints of the third and fourth fingers became much swollen; temperature 102.4° F. After a few days a scraping, systolic murmur was heard

in the aortic region, and on the twelfth day after admission to the hospital the patient, with but a moderate fever, succumbed to a fatal syncope. On section a verrucous mass was found attached to the aortic valve, and beneath this was a rupture. Microscopical and bacteriological examinations revealed the presence of gonococci.—*Zeit. f. Klin. Med.*, 1896, Bd. 29.

Keller of Freiburg (*Deutsch. Archiv für Klin. Med.*, Bd. lvii, hefte 3 and 4) describes a case of malignant endocarditis affecting the valves of the pulmonary artery following gonorrhea. His *résumé* of the case is as follows: "Gonorrhea four weeks before the appearance of rheumatoid joint symptom in the lower extremities. At the time of entrance to the hospital, two weeks later, clinical manifestations of endocarditis at the pulmonary valves, with intermittent fever and splenic tumor; three weeks later hemorrhagic nephritis. Gradually-developing cardiac insufficiency; dropsical dyspnea; terminal pericarditis; death in six months after the appearance of gonorrhea. Autopsy: Verrucous endocarditis, with ulceration of the semilunar valves of the pulmonary artery; thrombi in the left ventricle; infarcts in the spleen and kidneys; emboli in several of the branches of the pulmonary arteries; hemorrhagic nephritis.

"Cultures and microscopical examination in this case revealed on the valves of the heart merely streptococci; no gonococci. The case, therefore, was looked upon as the product of a mixed infection with the streptococcus pyogenes and the gonococcus, the infection atrium being in the diseased mucous membrane."

Dr. Alfred Stengel read a paper on "Gonorrheal Endocarditis" before the College of Physicians of Philadelphia, May 6, 1896, and gave in detail the history of a young woman, aged twenty, who was admitted to the German Hospital on October 12, 1895, and was under the professional care of Dr. Lawrence Wolff, who kindly allowed him to publish the case. The autopsy was made six hours after death. Microscopical and bacteriological examinations revealed the presence of the cocci in the scrapings of the cardiac vegetations.

Dr. Stengel referred to two cases of

gonorrheal endocarditis that were reported by Brandes in the *Gazette des Hôpitaux*, 1854, and then gave the following cases, which must have taken a vast amount of time to collect: Hervieux (1858), Lorin (1872), Tixier (1866), Voelker (1868), Lacasagne (1872), Marty (1876), Pfuhl (1878), Morel (1878), Trager (1880), Schedler and Leyden (1880 and 1882), Martin (1882), Derignac (1884), Frases (1885), von der Velden (1887), Weckerle (1886), Rothmund (1889), Genzinsery (1889), and reports of cases observed during life or post-mortem, or discussed the question in a general manner. Interest, however, has recently been revived by the reports and dissertations of His (1892), Leyden, Wilms, Souplet, Councilman (1893), Fressel (1894), Litten (1895), Thayer and Blumer (1895) and Dauber and Borst (1896). He stated that several later cases have been added.

It is now generally acknowledged that many complications of gonorrhea, such as arthritis, tenosynovitis, bursitis, periostitis and pleuritis, are dependent upon the presence of gonococci, the organisms being carried from the point of local infection to distant parts.

Ahman (*Archiv für Dermatologie und Syphilologie*) gives the following: "Five days after the beginning of the gonorrhea the patient presented the signs of cystitis and an arthritis of the wrist and of the tibio-tarsal articulations, accompanied by a slight fever. Bacteriological examination of the fluid obtained by puncture of the tendon of the right anterior tibial muscle showed a pure culture of the gonococcus. Gonococci were also found in the blood and in the ascitic fluid. In order to verify the demonstration made with gonococci in blood serum culture the gonococci were injected into the urethra of a man who wished to undergo the experience of having gonorrhea. In a few days, as a result of that inoculation, the man gave evidence of a gonorrheal discharge from the urethra, and, in turn, synovitis of the tendons of the pedal muscles; the exudations from the synovitis also showed the gonococci present in pure culture, thus fulfilling all the postulates of Koch in the establishment of the existence of an infectious disease."

Wertheim (*Zeitschrift für Geburtshülfe und Gynäkologie*, Band xxxv, Heft 1, 8), at a meeting of the Berlin Obstetrical and Gynecological Society, demonstrated a preparation from a case of gonorrheal cystitis which showed the capillary and precapillary veins filled with gonococci, a condition of gonorrheal thrombosis and thrombo-phlebitis. The cystitis was secondary to a gonorrheal vulvo-vaginitis and associated with infection of both ulnar joints.

The microscopical sections presented were made from a portion of mucous membrane excised during cystoscopic examination. A small portion of this excised mucous membrane was also placed in prepared blood serum, with the result that a pure culture of gonococci was gained. Wertheim says, regardless of the statements of Guyon and his school, Bumm, Sanger and others (that a gonorrheal infection of the bladder is always a mixed infection), the finding of gonococci alone in tissue and blood-vessels in this case proves beyond a doubt that pure gonorrheal cystitis, a gonorrheal thrombosis and thrombo-phlebitis has never before been demonstrated, and the writer believes this a step in advance and towards a better knowledge of this disease. He says it is useless to seek for gonococci except in the acute stage; that they very soon disappear. This patient was well after four weeks' treatment.

(To be continued.)

THE DIAZO-REACTION IN TYPHOID FEVER.

By E. T. Duke, M.D.,
Cumberland, Md.

READ BEFORE THE TRI-STATE MEDICAL ASSOCIATION
OF WESTERN MARYLAND, WESTERN PENNSYLVANIA
AND WEST VIRGINIA, DECEMBER 15, 1898.

THE practical advantages of an early diagnosis in typhoid fever can hardly be overestimated. Without an examination of the blood it is difficult to arrive at a positive conclusion as to the true nature of a fever within the first few days of its onset, and it usually becomes necessary to wait for symptoms to develop that are in themselves diagnostic.

An easy test to determine or even aid

in the diagnosis would be welcomed by all physicians, especially those who are without the advantages of laboratory facilities. In Ehrlich's diazo-reaction we have a simple method of determining the presence or absence of typhoid fever by an examination of the urine. The reaction depends upon the fact that if sulphanilic acid (amidosulphobenzol) be acted upon by nitrous acid diazo-sulphobenzol is formed, which unites with certain aromatic substances in the urine to form aniline colors. The following solutions are used to obtain the reaction:

- No. 1. Acid sulphanilic, gr. iv.
Acid hydrochloric, dr. iss.
Aq. destill., oz. iv.
- No. 2. Sodii nitrat., gr. v.
Aq. destill., oz. ii.
- No. 3. Aq. ammonia.

Use one drop of No. 2 solution to forty drops of No. 1 in a test tube, add an equal quantity of urine to be examined, shake well, and add with a pipette a small quantity of aqua ammonia. If the reaction is present a bright red color will be seen at the point of contact of the solutions. The red color will be diffused and a tinted foam will be seen at the top if the test tube is shaken. This is positive evidence of the success of the reaction.

From the fourth to seventh day of typhoid fever and thereafter until convalescence is begun the reaction is present. In rare cases of phthisis it is occasionally found, but I have only seen it in one case out of a number, and that was in a patient with general tuberculosis.

I have found it eminently satisfactory in typhoid fever. In only one case did it fail to show itself, and that was for want of care in making the examination.

Sometimes the reaction is present immediately after the urine is passed, and is absent after twenty-four hours. At other times it is not present until the urine has stood for twenty-four or thirty-six hours. I preserved the urine in one case for three weeks, and the reaction was present at the end of that period. The second day is the earliest time at which the reaction was had in my cases. It is usually absent by the end of the third week.

Two physicians who had failed to agree in the diagnosis of a supposed case of typhoid fever submitted the patient's urine for examination. The absence of the reaction confirmed the diagnosis of the attending physician that the case was not typhoid.

Through the kindness of a number of physicians who furnished samples of urine of their patients I have made a large number of examinations, and am able to tabulate some of the results, which show the value of this test in typhoid fever.

Twenty cases of typhoid fever were examined. The reaction was present in all but three; two of these were convalescent patients; the examination in the third was faulty. In twenty-three examinations of fever cases where the diagnosis had not been made by the physicians the reaction was absent in all. Typhoid fever was suspected in some of these, but observation showed that the typhoid condition did not develop, and malaria was the subsequent diagnosis in the majority. Twelve cases of phthisis were examined, with negative results in all. The same result followed the examination of three cases of pneumonia, four of scarlet fever, two of jaundice, one each of remittent fever, paresis, gastritis, valvular disease of heart and cerebro-spinal meningitis.

Quite a number of examinations were made of normal urine, with absence of reaction in all.

The conclusion arrived at from these examinations is that the reaction is almost invariably present in the urine of typhoid patients between the fourth day and the end of the third week; that it is seldom found in other diseased conditions, the brown color being mistaken for scarlet, the hue of the true reaction. Faulty examination causes failure in some cases and care in securing the urine in others.

I append the following letter from Dr. Percival Lantz:

"Alaska, W. Va., December 9, 1898.

"Dear Doctor Duke—Complying with your recent request to report to you my observations upon the use of the diazo-reaction in typhoid fever, I desire to report briefly the following case now un-

der my care: B. B., aged twenty-one years, was taken ill on Monday, November 7. He had a chill, followed by fever and the usual prodromic symptoms of typhoid fever, namely: Headache, loss of appetite; epistaxis, aching limbs, etc. He continued at work, however, being fireman of a saw-mill engine, until the following Sunday, when he came home, riding twelve miles horseback. On Monday, one week from the date of his attack, I was called to see him, and found him with considerable dullness over the lower lobe of both lungs, distinct crepitant rales and a painful cough. His temperature was 103.5° and pulse 100. He complained of acute pain in both sides, increased by coughing, headache and pain in the limbs. There was also tenderness on pressure in the right iliac region, gurgling and tympanites. I was inclined to think at first that I had a case of typhoid-pneumonia, with special reference to the pneumonia part, which ran a typical course, the regulation rusty expectoration being present and becoming towards the last of a prune-juice character. In about ten days resolution took place, the cough and pain subsided, the respiration became less frequent, etc., but the temperature still kept high, reaching 103° every evening, the tympanites, tenderness and gurgling in the right iliac region continued, and the patient was very delirious. The tongue had a brown coat, and there was sordes on the teeth. I was convinced then that I had a case of typhoid fever from the start, and that the pneumonia was a complication. At this juncture I decided to use the diazo-reaction, which I did, and obtained a decided red stratum, and upon agitation the whole mixture became pink. Whether this result could be obtained in an ordinary uncomplicated case of pneumonia I do not know, but the test was evidently correct in this case, as the patient has gone through a regular course of typhoid fever and is just now convalescing. I have used the reaction in four other cases of typhoid fever, but they were all typical cases and were considerably advanced at the time the test was made. I have not as yet employed it in the beginning of any case.

"If this brief and hurriedly-written re-

port will be of any use to you I shall be glad to have you make use of it.

"Yours very truly,
"PERCIVAL LANTZ."

MORPHINISM IN NEURASTHENIA.

By E. O. Crossman, M.D.,

Markleton Sanitarium, Markleton, Somerset County, Pa.

DISEASE.	DAY.	REACTION.	NOTES.
Typhoid Fever	6	Present	Severe
Typhoid Fever	9	Present	Mild
Typhoid Fever	10	Present	Mild
Typhoid Fever	10	Present	Mild
Typhoid Fever	9	Present	Severe
Typhoid Fever	14	Present	Average
Typhoid Fever	15	Present	Average
Typhoid Fever	2	Present	Severe
Typhoid Fever	10	Present	Very severe
Typhoid Fever	8	Present	Average
Typhoid Fever	10	Present	Mild
Typhoid Fever	7	Present	Severe
Typhoid Fever	6	Absent	Ex-faulty
Typhoid Fever	40	Absent	Convalescent
Typhoid Fever	20	Absent	Convalescent
Typhoid Fever	14	Present	Mild
Typhoid Fever	12	Present	Severe
Typhoid Fever	4	Present	
Typhoid Fever	12	Present	
Typhoid Fever	16	Present	
Doubtful Fever	3	Absent	Developed Malaria
Doubtful Fever	4	Absent	Developed Malaria
Doubtful Fever	2	Absent	Developed Malaria
Doubtful Fever	5	Absent	Developed Malaria
Doubtful Fever	5	Absent	Develop. Lumbago
Doubtful Fever	3	Absent	Developed nothing
Doubtful Fever	5	Absent	Developed nothing
Doubtful Fever	20	Absent	Not Typhoid
Doubtful Fever	6	Absent	Dev. Pneumonia
Doubtful Fever	2	Absent	Developed nothing
Doubtful Fever	3	Absent	Dev. Kidney dis.
Doubtful Fever	2	Absent	Developed Malaria
Doubtful Fever	4	Absent	Tubercular case
Doubtful Fever	7	Absent	Nothing
Doubtful Fever	6	Absent	Developed Malaria
Doubtful Fever	14	Absent	Developed Malaria
Doubtful Fever	15	Absent	Developed Malaria
Doubtful Fever	14	Absent	Developed Malaria
Doubtful Fever	2	Absent	U. S. Volunteer (Camp Meade)
Doubtful Fever	14	Absent	
Doubtful Fever	10	Absent	
Phthisis Pulmonalis	1 year	Absent	
Phthisis Pulmonalis	6 mo.	Absent	
Phthisis Pulmonalis	8 mo.	Absent	
Phthisis Pulmonalis		Absent	
Phthisis Pulmonalis		Absent	
Phthisis Pulmonalis	3 years	Absent	
Phthisis Pulmonalis	4 mo.	Absent	
Scarlet Fever	4 days	Absent	Severe
Scarlet Fever	2 days	Absent	Mild
Scarlet Fever	3 days	Absent	Mild
Scarlet Fever	12 days	Absent	Mild
Pneumonia	7 days	Absent	Following Typhoid Fever
Pneumonia	3 days	Absent	
Jaundice	6 weeks	Absent	U. S. V. (Santiago)
Jaundice	3 weeks	Absent	
Remittent Fever	3 weeks	Absent	
Gastritis	1 week	Absent	
Malarial Fever	3 days	Absent	
Paresis	15 days	Absent	Died in 3 weeks
General Tuberculosis	2 mo.	Present	Died in 1 month

READ BEFORE THE TRI-STATE MEDICAL ASSOCIATION OF WESTERN MARYLAND, WESTERN PENNSYLVANIA AND WEST VIRGINIA, HELD AT CUMBERLAND, MD., DECEMBER 15, 1898.

MORPHINISM is an irresistible craving for morphia, with a gradual increase of the doses to meet the demands of the system. The habit is usually acquired by the administration of the drug by physicians for some painful malady. Heredity influences the formation of the habit.

Neurotic persons are apt to become its victims, and it is of this class that I desire to speak especially at this time. A nervous system that is susceptible to the formation of the morphia habit would also fall an easy victim to the habitual use of cocaine, alcohol, chloral or chloroform by inhalation. Not infrequently does this class of patients take more than one of the above narcotics at the same time. Frequently they alternate from one to the other under the delusion that they can thus overcome the previous habit and free themselves from the habitual use of drugs. Time and space will not permit me to speak in detail of the symptoms, diagnosis and routine treatment of morphinism.

I wish to speak briefly of the special neurasthenia cases that come under the observation of every general practitioner, who are nearly always unsuccessful in bringing about a recovery in consequence of the very delicate state of the nervous system of the patient.

The various methods at our disposal for treating morphinism are:

1. Burkarde's method by slow deprivation. This is the oldest and most unsatisfactory of all, the period of suffering being prolonged, and nearly all cases either relapsing openly or succumbing to the temptation of taking the drug secretly. I have entirely discarded it.

2. The Levinstein method seems to have met with favor with some members of the profession, though we certainly

THE CONSCIENCE CLAUSE AND VACCINATION.—The conscience clause in the vaccination act of Great Britain has prevented about one-third of the children in England and Wales from being vaccinated. This is a very serious matter and what the results will be the future alone can reveal. Meanwhile physicians are powerless in the face of such an important law.

are not warranted in the promiscuous recommendation of this plan of treatment, as the immediate withdrawal, in my experience, always causes maniacal delirium; it is apt to cause collapse, paralysis of the heart, and should not be recommended except in selected cases; at best it produces a great shock to the nervous system. But for the danger to the patient, this method, though not humane, would be satisfactory, as it helps the patient in the quickest possible way over the difficulty.

3. The Erlenmeyer method is the most rational, though not always practicable, for the class of cases under consideration who are anemic, dyspeptic or neurasthenic, as this method relieves the patient of the customary dose in from three to eight days. It is not safe, in this particular class of cases, to entirely withdraw the drug in so short a time.

The method that has proven most satisfactory in my hands in the sanitarium is something as follows: First, strict supervision and absolute control of the patient. The rapid reduction at first of one-half the dose each day until one grain or less is taken in twenty-four hours. At the end of a week or ten days, from the small dose make a little reduction each day until the patient is entirely free from the drug. This can usually be accomplished in from two to three weeks. The treatment must be subject to variation, according to the patient's condition from hour to hour, following the time of complete withdrawal by doses of codeine in sufficient quantity to control pain; bromide of caffeine in two-grain doses during the early part of the day for nervousness and depression, together with mild Turkish baths, electric and salt baths, according to the patient's condition. At night sulphonal, trional or bromide of ammonium may be used to produce sleep.

These patients do best under the complete or modified rest treatment. With this method many cases that have not been successfully treated by the routine methods have been restored to complete health. These cases should remain under treatment from six months to one year. Too much time and attention cannot be given patients at this critical

period. His environments should be pleasant; his life regular, with much exercise; his diet supervised, and strict attention given to his moral and religious nature.

How can we prevent relapse? This passion is not unlike others. The patient must, if possible, be kept away from temptation, amid healthy surroundings, and the longer this can be accomplished the greater will be the guarantee against a relapse.

Zabaco said, with reference to preventive treatment: "I do not advise physicians no longer to make morphia injections, nor even to lessen the number of prescriptions of morphia. This would be to deprive ourselves of one of our best remedial agents in certain cases. But I believe there would be fewer morphomaniacs if, on one hand, physicians would always insist on themselves making hypodermic injections of morphia for their patients, never intrusting their syringe and morphia to anyone, and if, on the other hand, pharmacists would never fill a prescription for morphia except for the exact number of times indicated on the blank, and once only when there is nothing stated to the contrary.

"I am convinced that this very simple rule would virtually put an end to morphinism without depriving therapeutics of a precious remedy which is discredited indeed, though unjustly, because of the abuse that has been made of it."

Society Reports.

TRI-STATE MEDICAL ASSOCIATION OF WESTERN MARYLAND, WESTERN PENNSYLVANIA AND WEST VIRGINIA.

MEETING HELD DECEMBER 15, 1898.

THE semi-annual meeting was called to order in the parlors of the Queen City Hotel, Cumberland, Md., Thursday, December 15, 1898. Dr. J. W. Johnston of Davis, W. Va., the president, was in the chair, and Drs. Lantz and Fochtman were at the secretary's desk. The minutes of the last meeting were read and approved. Resolutions of respect to the memory of the late Drs. M. A. R. F. Carr

and John A. Twigg, formerly of Cumberland, were read and adopted. Dr. E. O. Crossman of Markleton, Pa., was elected a member of the association. The reading of papers was then begun.

Dr. Edward O. Crossman of Markleton, Pa., read a paper on "Morphinism in Neurasthenia" (see page 21).

Dr. T. A. Ashby read a paper and gave an interesting talk on "The Diagnosis of Uterine Cancer in the Early Stages." Before reading his paper Dr. Ashby took occasion to congratulate the association on its progress and work, and dwelt at some length on the development of local medical societies throughout Maryland, which fact was due in a measure to the semi-annual meeting of the State Society. Dr. Ashby was elected an honorary member of the association and given a vote of thanks for his paper.

Drs. C. F. Hoffman of Keyser and *Richard Gerstell* of Cumberland participated in the discussion that followed Dr. Ashby's remarks.

Dr. E. T. Duke read a paper on "The Diazo-Reaction in Typhoid Fever" (see page 19).

Dr. J. M. Spear reported an operation for gunshot wound of the abdomen. The patient is now nearly well, but Dr. Spear thought best to postpone his detailed report until our next meeting.

An invitation was received to hold the summer meeting at the Markleton Sanatorium as guests of that institution. The invitation was accepted, and the meeting will be in June of the coming year.

Dr. O. H. Hoffman of Thomas, W. Va., related at considerable length his experience in the treatment of typhoid fever with antiseptics and antipyretics. He said he had used carbolic acid, iodine, salol, thymol, sulpho-carbolate of zinc and others. Thymol he considered very satisfactory. As it is irritating to the stomach, he suggested giving it with castile soap in capsules. He had used guaiacol in doses of three grains every three hours, and also locally rubbed into the thighs. He advocates the cold bath, but thinks sponging useless. Phenacetine in small doses, frequently repeated, he considers the best of all antipyretics.

DISCUSSION.

Dr. Spear opened the discussion with a brief review of the different treatments of the disease. He said, in substance, that carbolic acid began its career as an antiseptic about the same time he began his as a physician—about thirty years ago. At that time Dr. John Davis of Cincinnati was experimenting with the acid in typhoid fever, as it was being used for almost every other disease. It proved not to be a specific and had but little effect to divert the profession from the common treatment by turpentine and hydrochloric acid. Later Liebermeister's calomel purgative introduction, with 40-grain doses of quinine, had its run and gave satisfaction to the profession generally. Then the coal-tar products came in for a run and for a time seemed to be all that was desired. Woodbridge's treatment sprang into existence. He never adopted it, but compromised by selecting what he conceived to be the most potent ingredient, guaiacol carbonate, and gave it in larger doses at longer intervals—about five grains every two hours. For three years he has been using this treatment with satisfaction. After forty-eight hours of the use of the remedy it seems to lower the fever, quiet the delirium, check the diarrhea and put an altogether different phase upon the case. Yet when all these different treatments give about the same results, except the Brand treatment by cold baths, which is undoubtedly superior to all, and when we find one class of physicians starving their patients, another stuffing with liquids and stimulants, and yet another, including many of the prominent physicians of Pittsburg, feeding their patients solid food only and mostly that which they crave, it is questionable whether any treatment influences the course and whether they would not progress just as well without any treatment. He had no objection to find with Dr. Hoffman's treatment, but thought possibly he could leave off the phenacetine without detriment to his patient. He is still using the guaiacol treatment, but is likely to exchange it at any time for something newer. He believes in an initial purgative dose to sweep out of the

intestinal canal as many of the germs and their products as possible. He thought the ideal treatment would be an intestinal antiseptic that would destroy the bacteria or their toxins before they had time to be absorbed and set up the fever and other dependent symptoms.

Dr. Gerstell followed, condemning all medication, and thought that the great diversity of opinion on the subject of treatment was the best evidence that we have no treatment. He had treated cases through with one or two doses of medicine or none at all. He favored the bath, not for its effect upon the temperature, but for its tonic effect upon the nervous system. He said that possibly the fever was an advantage, and that the most fatal cases sometimes had a low or sub-normal temperature. He condemned the use of the coal-tar products. He favored milk as a diet.

Dr. Wilson had given the antipyretics as *Dr. Hoffman* had with the most happy results, and gave a graphic description of the soothing and happy effects of turpentine and aromatic sulphuric acid upon the patients. He condemned baths in the severest terms, and referred to their disastrous effects twenty-five years ago in the hands of the physicians of this town. Upon the whole he endorsed the paper of *Dr. Hoffman*.

Dr. Charles Hoffman thought he once had a specific for typhoid fever, curing about 100 consecutive cases. Then of a sudden he lost several cases together, and had not put his faith in specifics since. At one time he put great faith in turpentine, but upon being made sick by a dose he took himself at the request of a patient he had never insisted upon a patient taking it since. He had seen good results from the coal-tar products. He believed in medicine, and that, too, in large doses.

Dr. Hodgson did not believe in any routine treatment, but believed in treating every case scientifically and symptomatically according to the conditions presented. He believed in treating the patient and not the disease. He did not go into detail, but closed by saying if a typhoid patient died it was from a blunder either of the physician or the nurse.

Dr. Ashby said he had not treated cases

himself, but had been able to observe the hospital treatment as practiced in Baltimore, and knew that a great majority of the physicians in private practice supported that treatment, which was the cold-bath treatment. In 125 cases treated in the Maryland University Hospital the mortality was practically nothing, excluding four or five cases that were brought in moribund. Their plan was to take the temperature at intervals of two hours, and whenever the fever was above 102° they gave a bath. With it they used no medication, except to combat an occasional symptom, such as sleeplessness, pain, diarrhea, etc.

Dr. Hoffman, the writer of the paper, answered briefly some of the opponents to his practice, and claimed that high fever killed; that it led directly to death through producing fatty degeneration of the heart muscles. He believed the direct lowering of the fever through the agency of the antipyretics contributed to the safety of the patient. His mortality under the treatment has been 3 per cent.

At the close of the discussion the association adjourned.

Medical Progress.

A HISTOLOGICAL STUDY OF TYPHOID FEVER.—In the Journal of Experimental Medicine, *Dr. F. B. Mallory* of Harvard University has contributed a valuable work on the histological study of typhoid fever, in order to throw some light on the primary essential lesion of that disease and also on certain secondary lesions that result therefrom. His work is based on a study of nineteen cases of typhoid fever, lasting from ten days to four weeks. He examined the intestines, lymphatics, blood vessels, mesenteric lymph nodes, the spleen and liver, and from these he concluded that the typhoid bacillus produces a mild diffusible toxin, partly within the intestinal tract, partly within the blood and organs of the body.

This toxin produces proliferation of endothelial cells, which acquire for a certain length of time malignant properties.

The new-formed cells are epithelioid in character, have irregular, lightly-staining, eccentrically-situated nuclei, abun-

dant, sharply-defined acidophilic protoplasm, and are characterized by marked phagocytic properties.

These phagocytic cells are produced most abundantly along the line of absorption from the intestinal tract, both in the lymphatic apparatus and in the blood vessels.

They are also produced by distribution of the toxine through the general circulation, in greatest numbers where the circulation is slowest.

Finally, they are produced all over the body in the lymphatic spaces and vessels by absorption of the toxine eliminated from the blood vessels.

The swelling of the intestinal lymphoid tissue of the mesenteric lymph nodes and of the spleen is due almost entirely to the formation of phagocytic cells.

The necrosis of the intestinal lymphoid tissue is accidental in nature and is caused through occlusion of the veins and capillaries by fibrinous thrombi, which owe their origin to degeneration of phagocytic cells beneath the lining endothelium of the vessels.

Two varieties of focal lesions occur in the liver. One consists of the formation of phagocytic cells in the lymph spaces and vessels around the portal vessels under the action of the toxine absorbed by the lymphatics; the other is due to obstruction of liver capillaries by phagocytic cells derived in small part from the lining endothelium of the liver capillaries, but chiefly by embolism through the portal circulation of cells originating from the endothelium of the blood vessels of the intestine and spleen. The liver cells lying between the occluded capillaries undergo necrosis and disappear. Later the foci of cells degenerate and fibrin forms between them. Invasion with polymorphonuclear leucocytes is rare.

Many of the phagocytic cells pass through the liver and lungs and get into the general circulation. A few come from the abdominal lymphatics through the thoracic duct.

Focal lesions may arise in the kidneys by occlusion of the veins of the pyramids by emboli of these phagocytic cells.

Focal collections of phagocytic cells

may occur in the heart and testicle by occlusion of lymph vessels.

The various sequelae of typhoid fever deserve more careful bacteriological examination, as shown by the study in one case of abscesses of the spleen where these seemed to arise in previously necrotic tissue, and of a case of pneumonia due to the pneumococcus, but complicated by the presence of the typhoid bacillus, in which great numbers of phagocytic cells were found in the exudation.

The thrombi which occur in the heart and in the veins of the lower extremities in the course of typhoid fever probably owe their origin to the same sort of lesions that cause occlusion of the vessels in the intestine.

Histologically, the typhoid process is proliferative and stands in close relationship to tuberculosis, but the lesions are diffuse and bear no intimate relation to the typhoid bacillus, while the tubercular process is focal and stands in the closest relation to the tubercle bacillus.

* * *

CAR SICKNESS.—When a person who contemplates a journey details a history of car sickness Dr. W. M. Bemus, in the Medical Record, advises a dose of calomel at night and Epsom salts before breakfast the day of starting, since during the journey and often for a day or two after the trip the bowels are constipated. Light, digestible food is allowed. In an emergency case his usual treatment is to lay the patient down in as comfortable a position as possible, apply a bandage to the eyes with cold water, and give a tablet consisting of acetanilid, gr. iiiss.; sodium bicarbonate, gr. i.; sodium bromide, gr. i-10; citrate of caffeine, gr. ss., and, if the heart's action seems weak, trinitrin, gr. i-100.

* * *

ACUTE URETHRITIS IN THE MALE.—From a specially-conducted experiment with potassium-permanganate irrigation Dr. James Pedersen, in the Medical Record, says: "I would conclude that while the duration of the discharge is thereby limited, and the evidences of the inflammation are rapidly reduced, the ultimate recovery of the mucous membrane is not only not hastened, but its course is not spared the usual disappointing relapse."

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Washington Loan and Trust Company Building.

BALTIMORE, JANUARY 14, 1899.

THAT manganese is efficacious in some forms of dysmenorrhea is no startling statement, but it is a relief to feel that such a serious symptom is amenable to drug treatment, and does not always call for the knife. Dr. Charles O'Donovan, in the *Journal of the American Medical Association*, noticed that even the athletic tendencies of the young woman of the present day did not prevent certain difficulties in menstruation, and that often the loosest clothing and hardest outdoor exercise did not bring health.

At first the operative gynecologists thought ovaries should be removed, and they were removed in great numbers, but the results were not satisfactory. Some cases occur which improve under the use of iron, but Dr. O'Donovan describes cases in which iron seemed to exert no influence, and in which the young woman grew month by month worse, until finally he used manganese, when gradually improvement was noted and a cure was the

result. In these cases there was no complaint between the periods, but at the time of each period the flow grew scantier and scantier, and often ceased in women who were neurotic and worn out.

This drug he used frequently in virgins whom it was not thought advisable to submit to a vaginal examination. Manganese alone and often combined with viburnum was very effective in this trouble, but his favorite combination was manganese, iron and hyoscyamus in pill form three times a day for a week before each period. The author finds that the black oxide in two-grain pills, either alone or in the combination above noted, may be kept up for a long time without harm, and certainly in a large number of cases brings about the happiest results without subjecting the young patient to an operation which she and her parents dread, and which may do harm.

It is well, in these days of the operating craze, not to forget our old friends of the pharmacopeia. An operation which involves so much should be the last resort.

* * *

THE Board of Estimates, which, according to the new charter of Baltimore, considers the financial needs and resources of the city, has just accomplished its work for 1899, and has tried to do this work in a manner just to the city and to the beneficiary institutions.

The present tendency of the day is towards consolidation and centralization. The wish of many members of the City Council of Baltimore would be to have all the sick of the city cared for through one channel under the immediate supervision of the trustees of the poor, and bring Bay View Hospital up to such a point of perfection that all work may be concentrated there or in some of its branches to be situated at convenient points in Baltimore. This for the present may be considered ideal, but from the cutting down of some of the hospital and dispensary appropriations it is evident that the future may have some revelations for the various private institutions.

The Board of Estimates has done its work well, and the City Council should endorse its action.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending January, 7, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	..	..
La Grippe.....	2	55
Pneumonia.....	..	40
Phthisis Pulmonalis.....	1	15
Measles.....	4	..
Whooping Cough.....	1	..
Pseudo-Membranous Croup and Diphtheria. }	20	4
Mumps.....	..	..
Scarlet Fever.....	9	..
Varicella.....	..	..
Varicella.....	4	..
Typhoid Fever.....	6	2

Dr. John Ruhrah is trying to impress on the city the importance of decided improvements at the quarantine station at Baltimore, and especially at a time when there is so much traffic in the bay and when there is danger of smallpox.

Miss Jennie N. Browne, the daughter of Dr. B. B. Browne of Baltimore, and who has recently been appointed instructor in physiology at the Woman's Medical College of Baltimore, has just been elected professor of that branch to succeed the late Dr. Batechelor.

The Baltimore Medical and Surgical Association held its annual election and banquet last Monday night. The following were elected: President, Dr. C. Urban Smith; vice-presidents, Drs. A. K. Bond and M. B. Billingslea; secretary, Dr. Eugene Lee Crutchfield; treasurer, Dr. W. E. Wiegand; executive committee, Drs. J. I. Pennington, J. R. Abercrombie and D. Z. Dunott; committee of honor, Drs. George A. Fleming, S. T. Earle and C. H. Dixon.

At a meeting of the directors of the United Charities Hospital, held at Cambridge, Md., a constitution and by-laws were adopted. Drs. B. W. Goldsborough, John Mace and Guy Steele were appointed the local medical staff, with Dr. Goldsborough chief. Dr. Thomas S. Cullen of Baltimore was appointed gynecologist, and Dr. Nathan R. Gorter, surgeon. The following gentlemen were elected members of the hospital staff: George W. Woolford, Thos. Drennen, Dr. T. H. Williams, W. Irving Mace, Dr. P. E. Hines and I. Nelson.

At the annual meeting of the directors of the Hebrew Hospital of Baltimore the superintendent reported that 254 patients had been treated during the year, and of these 184 had been discharged cured, eighteen unimproved and twenty-four died, leaving twenty-eight in the hospital at the beginning of the year. A total of \$4040 has been received during the past year from legacies and gifts. The staff consists of Drs. Joseph Blum, George Losekam, E. G. Tabet, J. W. Chambers, F. C. Bressler, I. E. Atkinson, T. S. Latimer, Aaron Friedenwald, Harry Friedenwald, E. J. Bernstein, W. T. Howard, Thomas Opie, Sylvan Likes, Charles G. Hill, George J. Preston, J. A. Seligman and B. Nyer.

Under the new charter of Baltimore the Board of Estimates, which recommends the amount of money to be spent by the city and the amount to be raised by taxation, has made the following recommendations of money to be appropriated to the various hospitals and dispensaries, and in some cases there has been a reduction in the amount apportioned. This will be submitted to the City Council, and some trimming may follow, but it is not likely that any one institution will receive more than this board recommends: Mount Hope Retreat, \$39,000; Maryland Hospital for the Insane, \$39,000; Second Hospital for the Insane (Springfield), \$26,250; Montevue Hospital for the Insane, \$150; Nursery and Child's Hospital, \$3700; Hebrew Hospital, \$1500; free baths, \$750; Southern Homeopathic Free Dispensary, \$500; Northeastern Free Dispensary, \$1200; Eastern Free Dispensary, \$1200; Baltimore General Free Dispensary, \$1200; Southern Free Dispensary, \$750; Baltimore Eye, Ear and Throat Charity Hospital Free Dispensary, \$750; Evening Dispensary for Working Women and Girls, \$750; College of Physicians and Surgeons' Hospital Free Dispensary, \$1500; Baltimore Medical College Free Dispensary, \$1200; Maryland Homeopathic Free Dispensary, \$800; Woman's and Child's Hospital Free Dispensary, \$500; Baltimore University Free Dispensary, \$1000; University of Maryland Free Dispensary, \$1000; Provident Hospital Free Dispensary, \$800; Hospital for Crippled and Deformed Children, \$3000; Hospital for Consumptives, \$1500; hospitals under the supervision of the trustees of the poor (free beds), \$55,000.

Washington Notes.

Dr. A. E. Gorman has been appointed resident physician at the Washington Asylum for a period of six months.

The report of the commissioners upon the bill providing for a municipal hospital is accompanied by some amendments, though the general features are approved.

At the last meeting of the committee on arrangements it was stated that 300 delegates, representing every section of the country, will participate in the second session of the pure food and drug congress, which meets here on the 18th inst.

Surgeon-General Sternberg is in Cuba inspecting the hospital facilities in the provinces of Havana and Matanzas. He was much displeased with the progress that is being made on the hospital at Savannah, Ga., and thinks it will be of little use this season.

At the meeting of the Washington Medical and Surgical Society Monday evening Dr. G. C. Clark read a paper entitled "True Gastralgia." An election of officers resulted as follows: N. P. Barnes, president; H. S. Medford, vice-president; Jesse Shoup, secretary; F. H. Miner, treasurer.

A bill has been introduced in the House appropriating \$250,000 of the money paid into the Treasury by the Freedman's Bureau for the purpose of erecting modern buildings for the Freedman's Hospital. The hospital is to be managed by the board of trustees of the Howard University, and to be maintained by the government as a national hospital.

Surgeon J. R. Wagner has been ordered home. Past Assistant Surgeon Farenholt is ordered to the naval hospital at Cavite; Surgeon D. O. Lewis to Mare Island navy-yards, and Assistant Surgeon E. W. Armstrong is transferred from the Scorpion to the Charleston. Assistant Surgeon W. H. Bell, at the navy-yard, Washington, has been transferred to the Naval Hospital; Assistant Surgeons E. Thompson, of the Massachusetts, and C. D. Langhorne at the Naval Academy, and E. L. Benton at the Naval Hospital, Washington, have been assigned to duty on the Solace. P. M. Ashburn, acting assistant surgeon at Fort Thomas, Ky., has been ordered to accompany the Fourth Infantry to Manila.

Book Reviews.

THE MEDICAL NEWS VISITING LIST FOR 1899. Weekly (dated for 30 patients); Monthly (undated for 120 patients per month); Perpetual (undated for 30 patients weekly per year), and Perpetual (undated for 600 patients weekly per year). The first three styles contain 32 pages of data and 160 pages of blanks. The 60-patient Perpetual consists of 256 pages of blanks. Each style is in one wallet-shaped book, with pocket, pencil and rubber. Seal grain leather, \$1.25. Thumb-letter index, 25 cents extra. Philadelphia and New York: Lea Bros. & Co.

The Medical News Visiting List appears again this year in a very attractive form, and is sure to be a favorite. The list of drugs and doses has been revised and the new remedies are included. There is no material change in the pages from last year. The thumb index is a great convenience. The leather of the cover is good and durable. There is a tendency in these lists to attempt to put too much in the general directions and make the book almost too bulky for the pocket.

THE PHYSICIAN'S VISITING LIST (LINDSAY & BLAKISTON'S) FOR 1899. Forty-eighth year of its publication. Sold by all booksellers and druggists. Philadelphia: P. Blakiston's Son & Co. 1898.

The Physician's Visiting List is like the one of last year, and is the oldest list published. It is made in a convenient form, and will probably not be changed so long as it is popular with physicians. It is much more convenient to carry than the list above mentioned, but the binding and pocket is much less durable and hardly strong enough for constant use. It is issued in sizes to suit all.

DR. EDWARD PYNCHON'S PRIVATE MEDICAL RECORDER FOR NOSE, THROAT AND EAR WORK. By Edward Pynchon, M.D. \$3.75 per hundred. Chicago: Published by the Clinic Publishing Co. 1898.

This is a very convenient record book, and has been compiled by Dr. Pynchon after examining all other records available. It is very full for a large private practice, but is so clear and definite that it will recommend itself to all specialists.

THE Medical Dial is a new monthly published at Minneapolis under the editorial charge of Dr. J. W. MacDonald, with a large number of collaborators, to one dollar a year.

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Original Articles.

THE TREATMENT OF COMPLETE RUPTURE OF THE PERINEUM BY DISSECTING OUT THE SPHINCTER MUSCLE AND ITS DIRECT UNION BY BURIED SUTURES.

By Howard A. Kelly, M.D.,
Baltimore, Md.

THE results of the best methods of the treatment of complete tears of the perineum are not entirely satisfactory in a large percentage of cases. The control over liquid motions and flatus is, as a rule, not secured immediately, and it is usually necessary to encourage the patient by telling her that she "will have to learn to control the muscle in the course of time." Such a control, more or less perfect, is gained in the course of several months. This defect in our present procedures is due to a faulty approximation of the sphincter ends, which lie buried in a pit, and are, therefore, difficult to bring into accurate, firm apposition by sutures embracing a considerable quantity of tissue surrounding the sphincter ends. I have to propose, therefore, the deliberate dissection and freeing of the sphincter ends, drawing them out about one and one-half centimeters from the tissues, cutting off the scarred ends and effecting a direct union of the freshened ends by two or three buried catgut sutures.

I was led to do this operation by my

experience in a case which had been operated upon six times, with a result which, judged by superficial appearances, was perfect, and yet the patient had no control over her bowel functions. I made a semi-lunar incision around the anterior periphery of the anus, and found the right sphincter end buried in scar tissue in the median line, while that of the left side was ectopic and attached out under the ischial tuberosity. The sphincter ends were united directly by buried catgut sutures, and the skin wound closed, and union took place *per primam*. In addition to these buried catgut sutures, a splinting suture of silkworm gut is passed through the middle of the sphincter, near the edges of the wound and on up through the septum, splinting the ends together and taking the tension off the catgut. I have since taken the hint given by this case and adopted a similar procedure in six cases of complete tear of the perineum due to confinement. Two additional cases were operated upon by Dr. W. W. Russell and one by Dr. Ramsay. In each instance there was a surprising difference between the new and older methods, noted at once in the earlier stages of the convalescence, and the patient was immediately conscious of perfect control of her functions. The bowels should never be locked up.

Great care must be taken not to leave any dead spaces in closing the remainder of the wound in the usual way, in order to avoid all risk of infecting the buried sutures.

I only recommend this operation to those who possess considerable skill in doing plastic operations and in securing a snug, accurate adaptation of the parts.

ROMAN FEVER.

By Charles C. Bombaugh, M.D.,
Baltimore.

STATEMENTS made by that accomplished *litterateur* and traveler, Mr. W. J. Stillman, in his recently-published book, "The Old Rome and the New," are entitled to more than a passing notice in view of the stereotyped allegation that Rome is an unhealthy place to live in. Mr. Stillman says that in a residence of nearly a dozen years in the aggregate, and extending over a period of nearly thirty years, he has never had in his family a single serious illness or a case of typhoid or malarial fever; that among his friends and acquaintances he has never known half a dozen cases of intermittent or remittent fever, and not one of any gravity, and that he has repeatedly stayed in Rome during the entire summer without any discomfort or inconvenience. He adds that he never saw a case of the pernicious form of malarial fever specifically named from the locality, and that Dr. Drummond and other physicians with whom he was well acquainted and who have practiced in Rome for many years never had a case, the malarial affections within the range of their knowledge and treatment being similar to the intermittents of the United States—annoying, but not dangerous.

These statements are strengthened and confirmed by the statistics of the sanitary department of the Italian government, which, Mr. Stillman says, are drawn up with the greatest care and exactitude for the purpose of improving the sanitary condition of the country and with no reference to publication or to foreign opinion. He was allowed access to the reports for the commune of Rome, including the Campagna and the outlying towns and villages, Ostia and its marshes, with all the malarial districts in the Ager Romanus. In these returns he found that out of a population of over 500,000 the total of deaths from malarial fevers in the year 1890 was 308. In 1897 this fractional ratio was reduced to 300. The narrow scope of this paper precludes citation from the monographs of such special

writers on this subject as Sforza, Sarazin, Falcini, Bracci, Balestra and Torelli.

On one occasion the writer, with his family, visited the Eternal City in the month of June and the early part of July, and aside from obedience to the instructions of a very accomplished guide, took no unusual precautions. That worthy said: "Shut your bedroom windows after dark; look to the transoms over your doors for ventilation; do not let me hear of any sentimental trips to the Coliseum by moonlight; the danger of marsh miasm from the Campagna, if there is any danger, is after sunset; I do not believe in this fuss about swamp poison; it is absurdly exaggerated, but, anyhow, take the benefit of any doubt."

The Campagna di Roma extends from Civita Vecchia to Terracina, a length of more than ninety miles, and from the Mediterranean to the mountain ranges, a width of nearly thirty miles. Its southern portion embraces the Pontine Marshes. At the distance of thirty miles from these marshes Rome is in no more danger of paludal mischief from that source than it is from the northward district of Maremma, in Tuscany, the plague-spot of Italy. Hence Dr. Colin, surgeon-general of the French army thirty years ago, was quite safe in saying that the malaria of the Campagna is due less to effluvia from the marshes than "to exhalations from a soil very fertile and untilled under a sky of fiery heat during the daytime, from July to October, and comparatively very moist and cold during the night." (*Traité des Fièvres intermittentes.*)

Lanciani says: "The history of malaria in connection with Rome must be divided into five periods—the prehistoric, the republican, the imperial, the medieval and the modern, each one marking a distinct stage in the increase or in the decline of the plague, as well as a change in the means adopted by the inhabitants of the fever-stricken district to protect themselves from the evil."

In the traditional period, and the early part of the historic period, immunity was due to geological conditions. The hills which became the site of Rome, with the valleys or ravines between them, abound-

ed with small geysers, hot sulphur springs and jets of steam, which indicated considerable subterranean activity, while the neighboring volcanic Alban hills were in a constant state of eruption. With the disappearance of the mineral springs and the extinction of volcanic life came pestilential invasion. We have proof of its virulence in the large number of altars and shrines dedicated by the early inhabitants to the goddess of the Fever and kindred divinities.

In the course of time public measures were adopted for checking the deleterious influence of the miasmata. These were, according to Lanciani, the construction of drains, the construction of aqueducts, the multiplication of well-paved roads, the proper regulation of cemeteries, and the organization of medical help. To these were added the drainage and cultivation of the Campagna, with the resultant conversion of a barren, pestilence-breeding tract into a garden spot, with costly suburban villas, delightful rural retreats, productive farms, olive groves and vineyards, abundant water supply, fresh lakes in place of stagnant pools, fine roads and bridges, and noble works of art. These sanitary and industrial triumphs were rewarded by corresponding healthfulness and cheerfulness. For palace or villa or cottage there was not a more attractive spot in the known world.

What followed the incursions of the Goths and Vandals in the fifth and sixth centuries is well known to every reader of history—the demolition of Rome and the desolation of the Campagna. The one, to a considerable extent, was rebuilt; the other remains to this day an unwholesome and unfruitful waste. During the successive sieges of Rome the districts around the camps of the barbarian invaders were given up to merciless devastation. Abandonment was enforced by the insecurity of life, and protracted indefinitely by the universal destruction of property, of material values whose extent and character are attested by the ruins that are left in the midst of the silence and solitude. For centuries, owing to the indolence of the people and the poverty of the government, nothing

in the way of reclamation was attempted. It remains for modern enterprise to redeem this vast acreage in the interest of agriculture and sanitation. The lowlands along the Alban hills, now regarded as hotbeds of infection, were once comparatively healthy. The Pontine region, Pliny tells us, was the abode of a dense and thriving population. Even in its present condition the Campagna is safe enough for human habitation during the daytime. It is the dampness that follows the sunset, the evening dew that falls heavy and chill, that is to be avoided. It is when the darkness sets in that Verminous, the god of microbes, as Lanciani puts it, and Cloacina, the goddess of typhoid, assert their malevolent sway. And if, as Mr. Stillman contends, the city of Rome maintains its healthfulness amid unhealthy surroundings—*salubris in regione pestilenti*—and the toxemia that is bred from neighboring swamps and marshes is not a malarial fever of the pernicious type, but an intermittent, manageable and responsive to judicious treatment, so much the better for gradual encroachment beyond the borders, and eventual restoration.

GONOCOCCUS NEISSER.

By Henry Alfred Robbins, M.D.,

President of the Washington Microscopical Society.

READ BEFORE THE SOCIETY ON DECEMBER 13, 1898.

(Continued from page 19.)

SUPPURATIVE INGUINAL ADENITIS WITH GONOCOCCI.

Hansteen (*Archiv für Dermatologie und Syphilis*, xxxviii; *Annales des Maladies des Organes Genito-Urinaires*, July, 1897) reports three cases of suppurating inguinal glands accompanying gonorrhea, in which a bacteriological examination of the pus showed the presence of gonococci in it. In one case, in which the abscess was opened with a bistoury, showing the pus, gave rise to a pure culture of typical gonococci, which, on being placed in the urethra of a healthy man, set up characteristic gonorrhea. In the two other cases, in which the abscess opened spontaneously, examination of the pus from the fistulous tract showed the pres-

ence of gonococci and streptococci. An attempt to cultivate the cocci on Wertheim's medium, made in one of these cases, failed.

ENLARGEMENTS OF EPIPHYSES AFTER GONORRHEA.

M. Paul Claisse relates in the *Lancet* the case of a girl, aged nineteen years, who showed a new and peculiar complication of gonorrhea. In the position of the costal cartilages persistent pain had occurred, which was increased by sudden movements of the thorax and still more by pressure. A series of nodosities developed on the cartilages meriting truly the name of gonorrheal rosary. Analogous swellings appeared at the superior epiphyseal junctions of the tibia. There was no affection of the joints or tendon sheaths. The patient was of small stature, which, with the form of her thorax, might suggest that the disease was a manifestation of rickets awakened by gonorrheal infection. But as the existence of gonorrheal osteo-periostitis had been demonstrated by Fournier and others, M. Claisse thought that it was natural to attribute the lesions to the direct action of the gonococcus. He explained the special localization by the age of the patient, whose ossification was not yet completed.

ALBUMINURIA IN GONORRHEA.

Colombini (*British Medical Journal*) has made a study of this subject in 372 patients suffering from acute gonorrhea, seventy-two being complicated by epididymitis. In none of the cases had any drug been administered, and there was no evidence of cystitis or any disease likely to cause albuminuria. The pus was carefully filtered off and five different tests for albumen were applied to the filtered urine. Out of the 372 cases albuminuria lasting from four to thirty days was found in sixty-six, and of these forty-two had epididymitis, twenty-four simple gonorrhea. The author believes that an ascending nephritis could be excluded in his cases, as also the influence of any drug, and, on the whole, he considers that the albuminuria was due to a process of general blenorrhagic infection comparable to that which occurs in other infectious fevers.

Dr. Roswell Park, the professor of surgery of the University of Buffalo, as far back as 1888 reported several cases of gonorrheal pyemia in the *Journal of Cutaneous and Genito-Urinary Diseases*. I remember sending to him the report of a case of gonorrheal pyemia which was reported by my friend, Mr. Savory of St. Bartholomew Hospital, London, and having received a most courteous reply. Before presenting to you for your consideration the most important of all the dire results of the gonococcus Neisser—gonorrhea in married women—I will report that the toxine of the gonococcus has been isolated by Wassermann from the dead cocci. It is so very virulent that the smallest amount produces inflammation at the spot applied, fever and violent pain in the muscles and joints. This discovery explains the phenomena which occur in gonorrheal affections even after all the cocci have disappeared. The best medium for cultivating the gonococcus has been found to be albumen of animal serum. He prevents coagulation when heated, the principal difficulty hitherto, by the use of nutrose (casein, sodium phosphate). Fifteen c. cm. pig serum are mixed with thirty to fifty c. cm. water, two c. cm. glycerine and two grammes nutrose, added and sterilized over a spirit flame. This is enough for six or eight plates. He concludes by liquefying a few 25 per cent. agar tubes, and he has then a culture medium in which the gonococci thrive finely. He succeeded in isolating the toxine by adding peptone bouillon to the cultures and killing them after three days' growth.—*Deutsche Med. Woch.*, August 12, 1897.

GONORRHEA AS A CAUSE OF STERILITY.

In the *Centralblatt für Gynäkologie* for July 3 there is an abstract of an article by Dr. B. Vedeler, published in the *Norsk Magazin for Lægevidensken* in 1885. Vedeler analyzed the cases of 310 women who had been married for at least a year without becoming pregnant. Seventy-two of them had been married ten years or over and the rest three years on the average. He examined fifty of these women's husbands, and found that thirty-eight of them had had gonorrhea and thirty-four of them had infected their

wives. He infers that in the whole number of husbands there must have been 235 who had had gonorrhea, and that 210 of them must have infected their wives. He regards this inference as supported by the fact that in 198 of the women he found the same inflammatory lesions as in the thirty-four who were known to have contracted the disease from their husbands.

GONORRHEAL SALPINGITIS.

Walton (*Centralblatt für Gynäkologie*, No. 39, 1893), in a very complete monograph on this subject, refers to a latent form of gonorrhea, where the organism is saprophytic, and which exists in the male as well as in the female. This latent organism, through an exciting cause, where a favorable culture medium is present, manifests itself, and thus it is that in the female the different uterine and adnexia inflammations are brought about. A pyosalpinx is commonly caused by a mixed infection of gonococci and pyogenic organisms, and this mixed infection can only be found early in the case, since the gonococci are later overpowered by pus cocci. The gonococci tend to migrate from the vagina into the cervix and thence into the uterine cavity. The tubes are infected by uterine contraction or some therapeutic measure. German statistics show 23 to 28 per cent., and English and American 70 per cent. of all cases of adnexia disease due to gonorrhea. The inflammation always extends to the ovary, and may cause a variety of conditions, from oöphoritis to an abscess, and, also, salpingitis is always associated with perimetritis, i. e., the inflammation extends through the tube wall, causing perisalpingitis, or else direct through the tube (ostium abdominalis), infecting the peritoneum and at times causing general peritonitis. Usually the inflammation does not extend beyond the broad ligament, or where there is a pyosalpinx it may infiltrate between the two peritoneal layers of the same. The entire tube is never involved, but the inflammation is limited to the outer two-thirds, where the mucous membrane folds are more complex and the growth of the micro-organisms more favorable. Walton believes these cases should be treated antiphlo-

gistically at the beginning, and later by hot irrigations (109½° to 113° F.), followed by an iodoform or ichthyol-glycerinetampon. He follows the operative technique of Lawson Tait, except where there are numerous adhesions. If hemorrhage or the pus has escaped into the abdominal cavity he irrigates with warm water at a temperature of 104° F., where Tait uses water at 98 3-5° F. In these cases he also uses a glass drainage tube.

At the fourth meeting of the German Gynecological Association, held at Bonn, 1891, Dr. Ernest Wertheim of Prague read a paper on gonorrhea, in which he made the following statements: "The idea of a mixed infection has been assumed for gonorrhea only because the gonococcus was said not to possess the power to penetrate deeper into the tissue and to excite inflammation there. It is remarkable, too, that it was never possible to discover in tubal pus any other pyogenous bacteria besides the gonococcus, though advanced inflammatory alterations were present in the tubes, ovaries and peritoneum. Altogether I can refer to sixteen cases in which I have been able to demonstrate the gonococci in tubal pus. In ten of these cases that proof was furnished by the microscope, in six by plate culture. I have never found any other bacteria than the gonococcus."

This fact, that tubal pus never contains other pyogenous microbes than the gonococcus, is more remarkable, because Bumm and Zweifel and others have asserted that preceding infection with gonococcus, even, predisposes to a secondary infection.

Several years ago my friend, Dr. Isaac S. Stone, invited me to be present at the Columbia Hospital to see him operate on a married woman for salpingitis. I remember that the left tube was full of pus and the ovary degenerated. I took the pathological specimen to Dr. Bromwell, the accomplished microscopist of the Naval Museum of Hygiene. The gonococci were abundant. I do not remember that any other organism was detected.

Dr. Joseph Price of Philadelphia, at the Southern Surgical Society, held at Richmond in 1891, stated: "It was less

important to confine a murderer than a man with gonorrhea or syphilis." He could relate three deaths from gonorrhea in medical students, and also stated he had operated on as many as 100 women, wives of men whom he had formerly treated for gonorrhea.

SUPPURATION OF THE MIDDLE EAR, COMPLICATIONS AND CONSEQUENCES, WITH REPORT OF ILLUSTRATIVE CASE.

By Dr. A. D. McConachie,

Surgeon to the Presbyterian Eye, Ear and Throat Charity Hospital, Ophthalmologist to Bay View Asylum, Baltimore, Maryland.

READ AT THE MONTHLY MEETING OF THE CECIL COUNTY MEDICAL SOCIETY, AT ELKTON, MARYLAND, JANUARY 11, 1899.

IN order to appreciate fully the pathological processes and therapeutical indications in suppurative conditions of the middle ear a brief *résumé* of its anatomical relations may not be amiss.

The middle ear consists of (1) tympanum, tympanic cavity, with (2) ossicles, (3) the Eustachian tube and the mastoid process.

The tympanum is very irregular in shape, its greatest diameters extending antero-posteriorly and supero-inferiorly. The drumhead forms the greater part of the outer wall and lies at the inner extremity of the bony auditory canal, being almost horizontal in the infant, at birth, and gradually becoming more perpendicular in the adult. The drum receives the sound waves from the air and carries them by means of the ossicles to the labyrinth.

The membrana in the adult is placed obliquely with the long axis of the bony canal, so that the inferior and the anterior walls of the auditory canal are longer than the superior and posterior. This is to be remembered in the extraction of foreign bodies and in other instrumental manipulations. The drum is attached at its margin to a groove in the bony canal, called the sulcus tympanicus, which belongs to the tympanic ring. The normal

drum is pearl or grayish in color, oval in shape and concave inward, the greatest concavity being at the umbo or extremity of the malleus. The short process of the malleus is the important landmark in an examination of the drumhead. Behind and in front of this process are two folds, which stand out prominently when the drum is drawn inward. Above and bounded by these is a triangular-shaped portion of the membrane, called the membrana flaccida, or Shrapnell's membrane, which is much thinner than the rest of the drum.

The superior wall, or roof, of the tympanum consists of a thin plate of bone, upon which the middle lobe of the brain rests. In the infant there is a suture (petroso-squamosal) in the roof, through which connective tissue and blood-vessels pass from the dura into the tympanum, a fact explaining why an acute inflammation of the middle ear, in an infant, often occasions more or less meningal irritation. This is closed in the adult, with rare exceptions. The jugular fossa is in proximity to the middle ear, which explains the frequent complications of phlebitis and thrombosis, liable to follow inflammation of the tympanum.

The inner wall separates the middle ear from the labyrinth or inner ear. It has the following points: The promontory, or turn of cochlea; the fenestra ovalis which contains the footplate of the stapes and lies above and behind the promontory. Below it is the fenestra rotunda, closed by a membrane. Behind these are the cone-shaped projection for the stapedius muscle and the aqueduct Fallopii, which encloses the facial nerve, a slight ridge of bone lying along the upper and posterior part of the inner wall. The upper portion of tympanic cavity, which contains portions of the malleus and incus, is called the attic. This opens into the mastoid antrum, behind, while the antrum is the passage of communication between the mastoid cells and the middle ear.

In the anterior wall of the middle ear the bony Eustachian canal is situated. The carotid artery is in close proximity to the anterior wall, so that in cases of caries or necrosis fatal hemorrhage may occur.

The ossicles are the malleus, incus and stapes.

The lining membrane of the middle ear is continuous with that of the pharynx and Eustachian tube, which opens on the external wall of the naso-pharynx.

The mastoid process communicates with the posterior part of the tympanum by means of the antrum. No two mastoids are exactly alike, some being pneumatic, some diploetic and some a combination of the two. In the pneumatic variety numerous cellular spaces are found extending into the temporal bone in different directions—around the lateral sinus, down to the apex and backward to the occipital suture—a point to be remembered in opening the mastoid, for it is important to remove all diseased tissue in these cells. Infants have but one cell usually, the antrum and mastoid being but poorly developed. From birth the process slowly develops, extending downward, until at five years it is quite like the adult in respect to arrangement of cells and position of antrum, except that it is smaller and less dense. The antrum and cells are lined by mucous membrane continuous with the middle ear, filled with air. The upper wall of the antrum is thin bone and separates it from the dura mater. The lateral sinus is in close proximity to the mastoid cells and rests against the inner wall of the process, and occasionally runs out of its usual course; hence care in operations upon the mastoid is needed.

The outer surface of the mastoid may have a very thick or thin wall, or may be rounded or flattened; generally a thick wall means a thin tip and digastric fossa; and, further, when the mastoid tip, or protuberance, is small, with a well-defined digastric fossa, the lateral sinus is apt to encroach upon the antrum.

Suppurative conditions of the middle ear have their origin variously, and are most common in childhood, usually beginning with what is commonly called "earache." The larger proportion of earaches are inflammatory, rather than neuralgic in character and the result of sub-acute or acute catarrh of the middle ear, due to cold in the head, the eruptive fevers, as measles, scarlet fever, etc., in-

fluenza, diphtheria, sniffing cold fluids into the nose, bathing, or, as complications of acute infectious diseases, as bronchitis, pneumonia, whooping cough, tuberculosis, cerebro-spinal meningitis and syphilis, infection usually taking place by way of the naso-pharynx, through the Eustachian tube.

The pathological changes following infection are hyperemia of the lining membrane of the drum cavity, with proliferation of its epithelium, engorgement of vessels and an exudation of serum and mucus, causing the drum to be distended, reddened and bulging. This stage we term acute catarrhal inflammation, and may go on to resolution or to suppuration. If the latter, we have a perforation of the drum, if left to itself, and a discharge from the ear, giving rise to acute suppuration of the middle ear, and if this be not speedily arrested the purulent process continues its ravages and the tissues break down and the purulent matter may find its way into the mastoid antrum and cells.

Chronic suppuration is but a sequel of acute suppuration and full of import to the afflicted patient. While the laity, and unfortunately certain members of the medical profession who are not well informed upon the consequences of the disease, minimize its importance and advise that it be left alone and that children will outgrow it, the patient's life may pay the penalty of its neglect. The disease may outgrow the patient.

The close relation of the tympanic and cranial cavities should suggest to the mind of every thoughtful physician the importance of prompt and skillful interference with the progressive destructive ravages of the suppurative process. It is not self-limited, it does not tend toward resolution, but toward dissolution, and no trifling makeshift is pardonable. The whole tympanic cavity is usually affected, drum partially or wholly gone, lining membrane hypertrophied, reddened and granular. The ossicles become necrotic, epithelial formations accumulate and block up the cavity, forming what are known as cholesteatoma. Perforations in acute suppuration usually heal after cessation of the discharge; rarely so after chronic processes.

The disease may extend to the labyrinth—this is infrequent—more frequently extending to the mastoid antrum and cells. This is due to the recumbent position and pouring by gravitation of pus from the tympanum back through the aditus ad antrum to antrum. The interference with the exit of pus from the external auditory meatus, by the formation of granulations, and polypi facilitates this.

Caries of bone should be suspected when polypi and granulations are present. The carious process may encroach upon the facial canal, involving the facial nerve; hence facial paralysis. Hence, as an offspring of middle-ear suppuration, we may find mastoid suppuration, phlebitis, sinus thrombosis, meningitis, subdural abscess, pyemia and abscess of the brain, with its attendant phenomena.

(To be continued.)

Society Reports.

THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY.

MEETING HELD MONDAY, JANUARY 9, 1899.

ABSTRACT REPORT.

IN the absence of the president, Dr. Finney, the meeting was called to order by Dr. Flexner.

EXHIBITION OF MEDICAL CASES.

Dr. Fletcher: 1st. The Treatment of Aneurisms.—Dr. Fletcher referred to the new method devised in Paris and published in the latter part of last year. It consists in injecting into the subcutaneous tissue of the thigh 250 c.c. of a 2 per cent. solution of gelatine in normal salt solution. It must, of course, be thoroughly sterilized and injected with proper aseptic precautions. The injections should be made at a considerable distance from the aneurism and repeated at intervals of from two to fifteen days. It is supposed that twenty injections are about the necessary number to produce a cure.

It has been suggested that a 1 per cent. solution of gelatine may be preferable, since great pain about the seat of injection has been complained of by some patients for several hours after the injection.

The beneficial effect of the treatment

is supposed to be due to increased coagulability of the blood, but there is some doubt about this, for some experimenters claim that increased coagulability cannot be brought about in this way.

Dr. Fletcher reported four cases of aneurism treated by this method.

Case 1.—J. B. two months ago had quite a distinct saccular aneurism of the arch of the aorta about the junction of the transverse and descending portions. He had received six injections, two of the 2 per cent. solution and, later, four of the 1 per cent. solution, because it was found that the stronger solution gave considerable pain. This pain was very intense and most severe about six hours after the injection. The patient appeared to be doing fairly well, when he was suddenly seized with an attack of dyspnea, with coughing and profuse hemorrhage, and died.

At the autopsy, in addition to the localized saccular dilatation spoken of above, there was found a general dilatation of the arch of the aorta, and at the point of pressure of the sac on the left bronchus there had been a perforation causing hemorrhage and death.

Case 2.—J. U. had an aneurism of the descending portion of the thoracic aorta. There was definite pulsation visible over the lower part of the thorax, accompanied with definite murmurs and intense pain at the seat of pulsation. He had received twenty-eight injections and as a result a very marked diminution in the amount of pain and in the pulsation. He had also gained nineteen pounds in weight during the treatment.

This was considered the most satisfactory of the four cases.

Case 3.—O. R. had a saccular abdominal aneurism. He received sixteen injections, with little or no evident improvement.

Case 4.—C. L., colored, presented a dilatation of the arch of the aorta. He had received twenty-one injections, and an examination of the blood in this case and in Case 2 had shown marked increase in its coagulability.

THE SCHOTT TREATMENT OF HEART DISEASE.

Dr. Fletcher referred to a recent visit

to Bad Nauheim, where he had the opportunity, through the courtesy of Dr. Theodore Schott, of seeing the treatment applied. The essential factors of this treatment are thermal saline baths and the use of carefully-regulated muscular exercise. The treatment begins with a series of warm saline baths, followed by what is known as the carbon dioxide bath, and later regular exercise. The carbon dioxide, which is admitted into the water through tubes, comes into contact with the patient's body and produces a definite stimulating effect. The benefit of the bath treatment is believed to be the stimulation of the peripheral circulation, thus increasing the amount of blood in the skin and periphery and relieving the heart. The exercises are believed to act in the same way, and patients usually get the baths in the morning and the exercises in the afternoon. The baths are given at first for about six minutes, and the time is gradually increased until the patients are allowed to remain in the bath for about eighteen minutes.

Dr. Futchter saw a patient given his first bath. It was a case of myocarditis, in which the heart was very large, much dilated and its action extremely weak. Before he was put in the bath the area of cardiac dullness was carefully marked out on a piece of transparent paper. After the bath the cardiac dullness was again percussed out, the first diagram being placed over the second at definitely located points, and the change in the area of cardiac dullness was noted. In this instance the difference was a full finger's breadth. At first each diminution after the bath is not permanent, but eventually a gradual gain is made and a widely dilated heart may diminish to practically its normal size.

In order that these baths may be more widely used Dr. Theodore Schott has published his formulas, and during the past year a firm in New York, known as the Triton Company, has prepared the salts for sale. They furnish a box containing sodium bicarbonate and eight cakes of sodium bisulphate, the carbon dioxide being generated by the action of these two salts upon each other. Five pounds of salt are added to fifty gallons

of water, the sodium bicarbonate is then put in and the cakes referred to are placed about the patient as follows: Two beneath the shoulders, two at each side of the body and two under the knees. In a few minutes there is a rapid generation of the gas.

Dr. Futchter then exhibited a patient who had been treated in this way. He had had no rheumatism, was not a heavy smoker or drinker, but was found on physical examination to have a dilated heart, with very feeble pulse. Charts were exhibited showing the area of relative cardiac dullness before and after treatment. Starting with an area 12 cm. outside the ordinary line the cardiac dullness had gradually diminished with each succeeding bath until at the present time it was practically normal.

DISCUSSION.

Dr. Welch: In discussing the treatment for aneurism he asked if any attention had been paid to other factors than the coagulation time, particularly as to whether there had been any increase in the number of platelets in the blood or any diminution in the number of red corpuscles. He stated that the coagula in aneurism are not the same as ordinary clots forming outside the body, but are thrombi, which consist largely of platelets, and considered that it was difficult to bring the occurrence of thrombi in the body into any relationship with the coagulability of the blood. He referred to the fact that diseases like rheumatism, where there is a quick coagulation time, are not characterized by thrombi, whereas in other diseases, like typhoid fever, there are thrombi, but a slow coagulation period. He stated that there are indications showing the connection of these thrombi with the number of platelets in the blood, and referred to chlorosis, where there are frequent thrombi, with numerous platelets in the blood, and to hemophilia, where there is an absence of platelets and where coagulation is unknown.

Dr. Flexner: In regard to the question of coagulation he called attention to the fact that in the fatal case referred to there was absence of coagulation in the sacular aneurism beyond a very superficial deposit of thrombus, which was only 1

or 2 mm. in thickness and which did not extend over the entire wall.

Dr. Futcher: In closing the discussion he stated that in none of the articles or discussions that had been reported from Paris had he seen an mention of the relationship between the number of platelets and the coagulation. He had noticed, however, that in the patient who had shown the most marked improvement during a short period when the coagulation time was extremely delayed, seventeen minutes instead of three or four, as normal, practically no platelets were found in the blood. As his coagulation time again came down to normal the platelets again became more numerous.

HEMORRHAGIC INFARCTION OF THE INTESTINE.

Dr. Welch exhibited the post-mortem specimens from a case of hemorrhagic infarction of the intestine. The patient was a man fifty-two years old, who had been repeatedly admitted to the hospital with symptoms of arterial sclerosis and cardiac insufficiency. The symptoms were, in general, severe dyspnea, occasionally paroxysmal, and some edema of the lower extremities. He usually left the hospital after a variable length of time somewhat improved. He returned for the fifth time with the same general group of symptoms, and in the course of his last stay in the hospital developed acute abdominal symptoms, sharp, diffuse pain in the abdomen, with tenderness and great restlessness, and, in the course of thirty-six hours, died with symptoms of acute diffuse peritonitis, although no positive diagnosis was made. There had been no vomiting and no blood in the stools.

At the autopsy *Dr. Flexner* found a plug in the main trunk of the superior mesenteric artery completely occluding it, very recent and very slightly adherent to the walls of the vessel. Whether it was embolus or thrombus was not absolutely certain, but inasmuch as there was an affection of the heart, and thrombi were found both in the left auricle and left ventricle, the presumption was that the plug in the superior mesenteric artery was an embolus. There was a hemorrhagic infarction of the intestine, beginning in the

lower part of the duodenum, affecting the whole extent of the small intestine and involving also the cecum and the ascending colon.

Dr. Welch stated that while this is the usual distribution of hemorrhagic infarction observed in experimental cases, not more than four or five cases have been observed in human beings of such extensive character.

Dr. Welch reviewed at some length the from time to time to explain the production of hemorrhagic infarction, and referred to the experimental work performed by *Dr. Mall* and himself and published in the "Transactions of the Association of American Physicians" several years ago. He considered the important factors to be, first, the blocking of a terminal arterial supply; second, the susceptibility of the different having such a supply; third, that the blood which causes the infarction comes in through the anastomosing capillaries and arteries and not by reflux through the veins, and, fourth, that diapedesis occurs, not through injury to the walls of the vessels, but from the fact that arterial pressure is reduced to such a low point that there is practically no difference between that and the venous pressure, and the plasmic zone being obliterated the red corpuscles come into contact with the walls of the vessels and pass out through the lymph spaces, because that becomes the direction of least resistance.

He stated further that hemorrhagic infarction now belongs to the domain of surgery, for when the diagnosis can be made a laparotomy, with resection of the gut, affords an opportunity for recovery.

NEW METHOD OF EXTRACTING FOREIGN BODIES FROM THE NASAL FOSSAE IN CHILDREN.—The New York Medical Journal, in quoting from the Journal des Praticiens, relates a method of extracting foreign bodies from the nose in children, which *M. Felizet* has used with satisfactory results for five years. He injects through the sound nostril a current of warm salt water at a moderate pressure, which, returning by the posterior nares of the occluded nostril, forces the foreign body out, or at least allows of its being seized with forceps.

Medical Progress.

THE PRETUBERCULAR STAGE OF PHTHISIS.—Dr. Henry P. Loomis naturally thinks the best way to cure phthisis is to prevent it, and he goes over, in the Medical Record, the various evidences of a vital condition which predisposes to the development of phthisis or actually makes the true pretubercular stage. He makes the following summary of his statements:

1. It is possible in many cases, especially in chloro-anemics, to diagnose phthisis previous to the appearance of physical signs or of tubercle bacilli in the sputum.
2. Weight, respiratory capacity and chest measurement have no value in establishing the possibilities of the development of phthisis in themselves, but must be considered in relation to the height of the person, when they furnish three important aids to diagnosis.
3. Corpulence is obtained by dividing the weight expressed in pounds by the height expressed in feet (in a normal man this should be 26; in a woman, 23).
4. Thoracic perimeter is found by taking two measurements of the circumference of the chest—one at the moment of forced expiration, the other at the end of a forced inspiration. The average of these two measurements should never be less than half the height.
5. Vital capacity is the amount of air expressed in cubic inches which can be exhaled after a full inspiration. Normally it should bear the relation to the height of 3 to 1 for a man and 2 to 1 for a woman (i. e., for every inch of height there should be three cubic inches of vital capacity).
6. Chloro-anemia and persistent and unexplained disturbances of the digestive system are symptoms of the pretuberculous stage of phthisis.
7. There are two characteristics of the pulse found in the pretuberculous and early stage of phthisis—change of position has practically no influence on its rhythm; relative feebleness of arterial pressure.

MEDICAL TEACHING IN AMERICA.—

An American physician, writing to the Clinical Review from Berlin of medical affairs, and particularly of the inferior position of American graduates as compared with those of Germany—due mainly, of course, to their longer courses and greater thoroughness—says: "Although America now is fast approaching the foreign standard of excellence and thoroughness in medical education, it will be some time before the slow-witted Teuton will admit that anything American is as good as the German article; but the quickest way to teach him the supremacy of America is not to keep sending over here our medical men to study in his schools after they have finished with ours. Give our doctors better facilities and advantages in our own large cities. * * * Let our professors become famous by original research and experimentation, by clever operating and brilliant diagnosis, and we will not see our students going abroad to finish their education and be snubbed by their German cousins."

* * *

FOOD VALUE OF EDIBLE FUNGI.—

Mushrooms are chiefly of interest as a condiment, and their food value has been much exaggerated. A number of edible varieties have been analyzed, and their digestibility determined by methods of artificial digestion. (American Journal of Physiology.) The true digestible protein ranged from about 5 to 10 per cent.; watery element from 74 to 92 per cent. "In this respect they resemble ordinary vegetables, and the term 'vegetable beef-steak,' which is often applied to them, is very erroneous. The carbohydrate content of the fungi is relatively high, but until more is known regarding the nature and digestibility of the carbohydrate constituents of various vegetable foods, it will be useless to draw comparisons. As dietetic accessories the edible fungi may play an important part, but investigation has demonstrated that they cannot be ranked with the essential foods."

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BALTIMORE, JANUARY 21, 1899.

THE committee having in charge the arrangements for the Centennial Anniversary of the State Faculty next April **The Faculty's Centennial.** has issued a circular to the members and others interested calling attention to this important historical event, and asking for funds to meet the expenses of entertainment.

As the committee says, the Faculty during its long and eventful life has rendered invaluable service to the people of Maryland, and has given the highest standard and character to subjects of professional and scientific interest. The ablest men of the profession, representing its culture, talent and influence, have guided its work of usefulness with thought and wisdom. Its influence over the profession has been of an elevating and ennobling character. Its records bear testimony to a wise, pure and stimulating direction of medical opinion and to its enforcement of the principles of professional ethics.

It is proposed to make the Centennial Anniversary an occasion worthy of the events which it will recall by means of exercises of the most impressive and interesting character. The profession, both within and outside the State, will be invited to attend this meeting.

On the first night there will be the presi-

dent's address and a reception by the Faculty.

On Wednesday evening Dr. W. W. Keen of Philadelphia will deliver the annual address, after which there will be private receptions. Thursday the annual dinner will be held.

At the scientific meetings it is proposed to invite prominent members of the profession from outside of the State to read papers.

From ten to two daily there will be demonstrations in the hospitals and the schools.

There will also be a loan collection of portraits and relics, and members are requested to make known to the committee of any relics, portraits or other objects which might be of interest in this collection. All such information should be sent to Miss Noyes at the Faculty Hall, 847 North Eutaw street. A liberal sum of money is needed to carry out these plans, and the members of the profession are invited to send contributions to Dr. William Osler, 1 West Franklin street, as soon as possible. The circulars sent to the members of the Faculty and to others contain cards to be sent to Dr. Osler.

This is a subject of which too much cannot be said. The physicians form an important part of the community, and they should not only make their influence felt, but at a time like this they should appeal to their wealthy patients and friends to help a profession which is doing so much for the sick and poor. The JOURNAL will from time to time give reports of progress of this work. It is expected that the responses will be prompt and liberal.

* * *

A JOINT conference of the collaborators of the MARYLAND MEDICAL JOURNAL was held last Tuesday night, and **The Collaborators' Convention.** many new and excellent suggestions were made by those present. These suggestions will be put to practical use gradually throughout the year, and it will be the endeavor of all interested to draw from the best sources the most desirable material which the profession can produce.

With the corps of able men whose names appeared in the last issue, together with others who have since kindly agreed to assist in the work of editing, it is believed that the MARYLAND MEDICAL JOURNAL will make during this year advances worthy of the profession. Good, short, practical articles which contain useful hints are especially solicited, and criticisms are freely invited.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending January 14, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	..	..
La Grippe.....	1	35
Pneumonia.....	..	30
Phthisis Pulmonalis.....	1	22
Measles.....	6	1
Whooping Cough.....	1	..
Pseudo-Membranous Croup and Diphtheria. }	36	9
Mumps.....	1	1
Scarlet Fever.....	7	..
Varioloid.....	..	..
Varicella.....	2	..
Typhoid Fever.....	6	..

The Broca Hospital in Paris is in a very bad condition.

The Hospital for the Women of Maryland will shortly be enlarged.

Tennessee has just declared a prohibitive tax against the cigarette.

The University of Pennsylvania appeals to its alumni for aid in erecting a large laboratory building.

Dr. Oscar G. Mix, formerly of Charlottesville, Va., died at his home in Covesville, aged seventy-six.

Dr. William T. Councilman was entertained in Chicago recently by a large number of the prominent physicians there.

The City Hospital Training School for Nurses has been opened, and nurses will be taken on two months' probation.

The New York Board of Health is taking steps to examine all houses in which three or more cases of consumption have occurred since January 1.

The death is announced of Dr. Charles T. Hedges of Martinsburg, W. Va., aged seventy-five. Dr. Hedges had practiced his profession in Baltimore and Philadelphia.

At the annual meeting of the managers of the Baltimore General Dispensary the following physicians were elected: Drs. Henry M. Baxley, E. A. Munoz, S. G. Davis and Haughton Baxley.

Dr. Sidney O. Heiskell, for many years quarantine physician at the port of Baltimore, and later surgeon on the United States auxiliary cruiser Dixie during the war with Spain, has gone into business in the harbor as attendant physician to merchant ships.

A plan has been submitted to the City Council of Philadelphia for the construction of five filtration plants, with a total capacity of 270,000,000 gallons daily. The slow sand system is recommended for three of the plants, and mechanical filtration for the other two.

A bill has been drawn for introduction at the General Assembly at Albany which is to make provision for a board of control for the supervision and regulation of dispensaries, consisting of representatives from the medical societies and from the non-medical directors of dispensaries. The object is to prevent hospital and dispensary abuse.

Dr. Charles H. Richards, a prominent physician of Georgetown, Del., died at his home last week, aged seventy-one. Dr. Richards was born in Delaware, and received his medical degree at the University of Pennsylvania in 1851. For twenty years he was physician to the almshouse, and was twice president of the Delaware Medical Society.

At the annual meeting of the Richmond Academy of Medicine and Surgery the following were elected officers for the year 1899: President, Dr. Ernest C. Levy; vice-presidents, Drs. John Dunn, D. J. Coleman and J. W. Henson; secretary and recorder, Dr. Mark W. Peyser; assistant secretary, Dr. W. H. Parker; treasurer, Dr. J. Travis Taylor; librarian, Dr. M. E. Nuchols.

At the last annual meeting of the board of governors of the Presbyterian Eye, Ear and Throat Charity Hospital the following appointments were made: Drs. T. L. Savin, A. J. Bossyns and J. Frank Crouch were appointed additional assistant physicians in the eye department, and Drs. J. F. Jones, Charles G. Buck, H. Hardcastle, J. L. Spruill, R. H. Johnston and C. H. Teenken were also added to the medical staff. Dr. G. P. Crawford succeeds Dr. T. L. Savin as resident physician. Drs. Herbert Harlan, Hiram Woods and F. M. Chisolm were appointed as a medical executive committee. There were 10,320 new patients treated at the hospital during the past year. There were 33,502 visits made to the hospital by patients during the year.

Washington Notes.

Dr. Noble P. Barnes has been elected to the Chair of Diseases of Children in the Eastern Dispensary and Emergency Hospital.

At the Chemical Society meeting last week Prof. E. A. De Schweinitz read a paper upon "Curative Serum for Some Animal Diseases."

General Miles and other officers have recommended to Congress that medals of honor be awarded to nurses who have given meritorious services during the late war.

Dr. L. O. Howard delivered the address before the Washington Academy of Science Wednesday evening—subject, "Are Insects as a Class Injurious or Beneficial in Their Relations With Man?"

There were 130 deaths in the District last week, a death rate of 24.12 per 1000. There were twenty-three fatal cases of la grippe, four of diphtheria and two of typhoid fever. There are eighty-one cases of diphtheria and 130 cases of scarlet fever in quarantine.

Wednesday evening at the Medical Society Dr. John F. Moran reported a case of puerperal sepsis successfully treated with antistreptococcus serum, and a case of symphyseotomy. Dr. Lamb presented specimens—tuberculosis, tubercular vasa deferentia, tuberculosis in cattle.

At the last meeting of the board of directors of the Eastern Dispensary and Emergency Hospital the following changes were made in the staff: Dr. D. Olin Leech, transferred to General and Nervous Diseases, and Dr. N. P. Barnes, elected to the Chair of Diseases of Children. Dr. Wm. B. French was elected to the Chair of Pathology.

At the meeting of the Therapeutic Society Saturday evening Dr. Winter reviewed the progress in therapeutics during the last year. The election of officers resulted as follows: President, John F. Winter; vice-presidents, H. H. Barker and Louis Kolipinski; corresponding secretary, D. Olin Leech; recording secretary, N. P. Barnes; treasurer, J. S. McLain.

Acting Assistant Surgeon Arthur B. Smith, U. S. A., will accompany the Third United States Infantry to the Philippine Islands. Assistant Surgeon William F. Truby, U. S. A., has been ordered to Porto Rico. Acting Assistant Surgeon Baenstreet, U. S. A., will accompany the first detachment of the Seventh United States Cavalry to Cuba.

Book Reviews.

HUMAN ANATOMY. A complete systematic treatise by various authors, including a special section on surgical topographical anatomy. Edited by Henry Morris, M.A., M.B., London, Senior Surgeon to Middlesex Hospital, etc. Illustrated in by 790 wood-cuts, the greater part original and made expressly for this work by special artists, over 200 printed in colors. Second Edition revised and enlarged. Philadelphia: P. Blakiston's Son & Co. Price \$6.00.

This large volume, after five years of use, now appears in a second edition with a complete revision. It is edited by Henry Morris, and special articles are written by a number of men skilled in their departments. It is evidently a formidable rival of Gray, which has been for so long a friend of the student and undergraduate. A rather interesting chapter is that on abnormal muscles, by Sutton. Other additions to this edition are chapters on the skin, on vestigial and abnormal structures, on morphology and embryology. There is no histology in the book. There are many illustrations, some new ones and most of them original. The work is a valuable one. The editors and collaborators are all English.

NURSING: ITS PRINCIPLES AND PRACTICE. For Hospital and Private Use. By Isabel Adams Hampton, Late Superintendent of Nurses and Principal of the Training School for Nurses, Johns Hopkins Hospital, Baltimore, etc. Revised and enlarged. Illustrated. Pp. 6 to 512. Philadelphia: W. B. Saunders. 1898.

The second edition of this excellent work, the first edition of which was noticed in these columns several years ago, has appeared, and is undoubtedly a great aid to the nurse. It is written by a woman who has proved every step of the way, and while her remarks on rules of hospital etiquette may seem to the inexperienced a little strained, they are the reflections of her own large and valuable experience. There is really no great change in this edition, except that the book is brought up to our present knowledge. There is added a chapter suggesting division of the nurse's work over three years instead of two, and a course of lectures for this extended time is mapped out. There are some new figures in the book. Drs. John Whitridge Williams, W. D. Booker and Edward Cushing are thanked for valuable suggestions and aid.

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Original Articles.

THE RELATION OF PUBLIC HEALTH OFFICERS TO PRACTICING PHYSICIANS.

By John S. Fulton, M.D.,

Professor of Clinical Medicine in the University of
Maryland; Secretary of the State Board of
Health.

READ BEFORE THE CLINICAL SOCIETY OF MARYLAND,
JANUARY 20, 1899.

WITH the growth of political interest in public health, medical men in increasing numbers are engaged in the public service, and between those public officials and the rest of the craft a mild antagonism may be discerned. The relations which private practitioners bear to sanitary law have never been, and are not likely soon to be, quite comfortably adjusted. Preventive medicine grows so fast, and law follows so rapidly, that the physician has scarcely fitted his galled withers to one regulation before another is about his neck. Vital statistics have been gathered in Baltimore for more than quarter of a century. The generation which growled about the bother of reporting births and deaths has passed away. The doctor of today manifests a kind of a-b-c interest in vital statistics, and occasionally consults them, when, if it happens that they do not show something or other which they were never meant to show, he draws the callow inference that the statistics are worthless.

We at present carry this light burden of reporting births and deaths rather comfortably, and it is, perhaps, not necessary to defend the practice, though it is worth while to allude to some points of

more or less importance in the death certificate. We shall hear later in the evening something about the right of the State to exact these services, and about their relations outside of public health. Before all things, it must be remembered that a death certificate is a public document of great value. It may be needed at any time as evidence of any or all of the facts alleged therein. It must, therefore, contain in legible writing the facts obtained at the most favorable time and place. It must be brief, and no doctor will object to its brevity. Brevity is, however, not to be attained by the use of symbols. In the Health Department of Baltimore city are thousands of certificates indicating the color of deceased persons by the letter B or C, and the birthplace by the letters B. C. B may stand equally well for blue, brown or black, while B. C. may mean Baltimore City, British Columbit or brown chocolate. However obvious the interpretation of these symbols may seem, they are easily within the domain of what is called in legal parlance "reasonable doubt." Almost anything will do for a lawyer's punching bag. Courts very properly reject such certificates, and it is unlawful for the registration officers to give in the copies or transcripts of such records any translation of a symbol. The Health Commissioner, it seems to me, is fully justified in refusing to issue a burial permit upon a certificate containing any such abbreviation.

It is, perhaps, not necessary to offer the Clinical Society any advice as to correct entry under the cause of death. No one here really adheres to any obsolete pathology. But it is possible that someone may have a medical friend, not a member of the Clinical Society, who sometimes turns in a certificate of death from croup

or membranous laryngitis. It will give such a person comfort to be informed that certificates of death from croup go into the statistics as diphtheria, and are otherwise acted upon as cases of diphtheria, except that no one has yet been arrested for failure to notify such a case.

I have recently seen a certificate which gave for the primary cause of death "Parletic," and another, after the word Immediate, wrote "Yes; he died right off." In the discharge of these small public duties the grades of professional intelligence are apparent to the medical observer, and even to the inexpert the death certificates draw a broad distinction between the fit and the unfit to practice medicine. It seems to me that the attention of the profession has hardly dwelt upon the educational value of the death certificate. The responsibility of a written record should, and I believe does, stimulate the indolent and the indifferent to keep better step with advancing pathology. I am sure that the daily scrutiny of these little documents acquaints the registrar with most of the laggards and stragglers.

In the notification of infectious diseases the physician's private interests seem most opposed to his public duty. Their neglect of this ordinance is based upon the not wholly unreasonable belief that to report to the health authorities is to invite the displeasure of their patrons. In this matter the practicing physician is really in a dilemma, and it is worth while to inquire the way out of it.

Unless he reports a case of diphtheria, the responsibility of isolation and disinfection rests upon him. If, on the one hand, he neglects isolation and disinfection, he is untrue to the interests of his patients. If, on the other hand, he attempts to isolate and to disinfect, he assumes responsibilities for which he is not paid, and which he is incompetent to discharge. I am sure that no physician would object to report his infectious diseases if his clients desire it. The householders are the real obstructors, and if their views could be altered, the difficulties would vanish. It has always seemed to me a pity that the doctors should stand unwillingly in this breach between the people and the health officials. If the law would place the responsibility with the

interests directly involved, the physicians would be measurably relieved. The householder has a right to be instantly informed when the physician has made a diagnosis. Physician and householder are equally interested in early diagnosis. In announcing a diagnosis of diphtheria the physician should expressly decline to be responsible for the safety of other persons within or without the house, and should speak in a confident manner of the ability and the readiness of a department of the city government to take charge of these matters. If proper reasons were tactfully given for the notification, and practicing physicians would secure, as they easily might, for the health officials the respect which their services deserve, popular aversion to official intervention would soon disappear. In communities older, but far less enlightened than ours, these services of the health officers are demanded by the people. Whether the notification of the authorities is rightly required of the physician or not, the law as it stands ought to be enforced. Certainly, the Health Department has more than a right, a need, to know where infection is, and if the information is not properly obtainable directly from the physician, lawmakers must find out how otherwise this essential knowledge may be rightly acquired.

Boards of health have lately made a new step which brings them into closer relations with practicing physicians. The public biological laboratories offer to physicians valuable aid in the diagnosis of certain infectious diseases, and in the Health Department of Baltimore city this has been done with far too little emphasis on the wider relations which the laboratory bears to public health. The advantage of this service to physicians is merely incidental and by no means intended as a gratuity. We are yet, I hope, very far from that sort of paternalism. The records of the city biological laboratory should in the course of time develop a value that cannot be reached by any private laboratory. Yet physicians object to answering a few—perhaps half a dozen—simple questions about their cases, and seem to think that specimens sent in any one of a hundred ways should answer all the legitimate purposes of the depart-

ment. The information which the Health Department asks to be returned with the specimens is not demanded by virtue of the general police power of the city, but is asked as a reasonable exchange for the service it offers. This information the department desires for its own purposes, and those who are unwilling to make the barter should be sent elsewhere for the assistance they desire. The laboratory, having been started on a one-sided basis, has at present no records of any value, save upon diphtheria. On this subject the records have by no means all the data which could easily have been obtained. The examinations for typhoid fever have been a free gift to the doctors, no advantage whatever having come to the department. Yet typhoid fever is a preventable disease of perennial importance.

Whenever the medical men of this city have spoken upon matters of general sanitation they have uttered sound views. But they cannot be said, as a body, to have exerted upon the sanitary government of the city anything like the influence which they possess. Measures of vital importance are constantly coming up in the City Council to receive the most befuddled consideration and futile treatment, while the citizens who can speak most authoritatively on these subjects make no public utterances. The press, usually ready to give fair treatment to public questions, nearly always able to make the right side win, and invariably eager to get the views of the best men, has access only to a few officials, whose statements are discounted as perfunctory. There can be no doubt that if the medical societies should give more consideration to public questions, and if the men whom we regard as leaders would grasp some of the passing opportunities to serve the city, we should be publicly and gratefully acknowledged as the beneficent brotherhood which we really are. Certain it is that the silence of medical men during those public agitations gives the color of justice equally to the alternative inferences either that physicians possess, as a class, narrow intelligence, or that the questions at issue are of small importance.

Perhaps nothing tries the public health officer quite as much as the very diluted

interest in preventive medicine manifested by his fellow-craftsman who is absorbed in cases. We are quite sure that the prevention of disease is the very highest branch of therapeutics, though human gratitude will, perhaps, never respond to it as to the touch of healing. The success of the medical officer of health depends no less than that of the consulting specialist upon the good-will of his fellows. So much does the medical officer feel this need that he will, I believe, welcome the criticism of that enlightened part of the community when observations are most worth consideration. It is the purpose of this paper to invite the sort of discussion that will lead to mutually helpful relations.

THE HEALTH DEPARTMENT AND DIPHTHERIA.

BEING A REPORT OF THE WORK OF THE
HEALTH DEPARTMENT AGAINST DIPHTHERIA DURING THE LAST SIX MONTHS
OF 1898.

By C. Hampson Jones, M.D.,
Health Commissioner of Baltimore.

READ BEFORE THE CLINICAL SOCIETY OF MARYLAND,
JANUARY 20, 1899.

GENTLEMEN—I have to apologize for not submitting to you a written paper upon this subject. I can only offer as my excuse the fact that we have been in the throes of preparing our annual report, which is hard work, and to this I believe all will testify who have been working with me.

We are particularly anxious to bring the Health Department and the practicing physician into such close relations that the one will feel the assistance of the other. In all advancements in medicine or any science there is always a great deal of obstruction offered by one person or another. In the Health Department's work the obstructions are mainly from the public or of the public. I believe the physician himself wants to help the Health Department, and desires to help his brother practitioners, but also he recognizes that the public has to be cared for in the line of pleasing. It must be remembered very carefully and particularly that the Health Department also recog-

nizes this to the fullest degree. We know, having experienced it, and also still experiencing it in our private work, that the public, not recognizing the importance it is to them, except when a neighbor has the disease, will pass the action of the Health Department, brought about by the report of the disease by the physician. The Health Department has had less obstruction this year—that is, in 1898—than in any year before, and I know from the chief of the department, I know it also from conversation with physicians and with people of the public—I say I know that the people are coming to recognize that the Health Department, assisted by the physicians, will be or is a great help to them.

I am very sorry to find, gentlemen, that the member of the City Law Department, who was to have been with us tonight, cannot be present. He is suffering from a cold, the grip not having yet developed. He was very anxious to be here, and probably on some future occasion he will present his paper. He desired me to say to you, however, that the death certificate is a legal paper, and we have what we call "transcript copies" of the records of deaths, and we were very emphatically informed that under no circumstances were we to interpret anything; that we must put in the books that which is given us, and if it is not sufficient, that is the fault of the persons who present it.

In taking up this work of the Health Department, I organized along certain lines about the first of May, and knowing what the diphtheria had been in 1897, knowing that there had not been any systematic effort to control it, and fearing that there would be some response from the diphtheria this year, in July I began to put into force that which the law says I shall. It is not a question of whether I think it is right, or whether the other health officers think it is right, but the law states that the Health Commissioner shall see that a yellow flag is hung from the window of every house in which the disease exists. Recognizing the fact that a yellow flag is not particularly pleasing, and that the people were not accustomed to it, I thought I would use the yellow cards instead. There was some little difficulty at first, but with the establishment

of the card system, the rest became practically easy.

We have also appointed a man who is known as the examiner of throats. The duty of this man to the public is to go to the house in which diphtheria exists, or has existed, and examine the throats of all the children, particularly, but best, of everyone in the house. After the physician sends to us the notice that the patient is well, then the disinfector is notified, and he at once goes and disinfects the house, with very few exceptions, within twenty-four hours after he has come from the pathological department.

In regard to children going to school, the rule of 1897 was carried out in particular by stating to the public that their children should not go to school until the house was disinfected and until after all the throats had been examined. To see that that was enforced, I put into effect the plan of communicating with all the principals of schools as to what houses were infected. I notified them twice a week, the list including those of the present day and also two or three days previous.

In addition to this, I, believing strongly in the use of antitoxine as a curative as well as a preventive agent, advertised more fully to the physicians and public that the antitoxine was there, free to all those who deserved it, and by this, of course, I meant those who could not afford to buy it. The amount of antitoxine used has been very large, and has been very effective in its work. In 1897, I think, Dr. McShane got the antitoxine there for the physicians to use, and, I believe, had some three or four different varieties, such as the New York preparation, Behring's and others.

The card system, the disinfecting system, and the use of antitoxine, I really believe, prevented a serious epidemic in December. I know this is a somewhat rash statement to make, but I think, if you will follow the facts with me carefully, you will see that I am not very far wrong. Soon after undertaking the work of the Health Department I recognized that I could not carry in my memory the location of the various diseases. I then established the system of maps, using two—one for the year before and one for the

present year. On these maps I marked out each house that was infected by diphtheria. In July, 1897, there were 38; in July, 1898, there were 92; in August, 1897, there were 47, and in August, 1898, there were 155; in September, 1897, there were 83 houses infected, and in September, 1898, there were 243. Now, in September was the time I thought there was certainly a great deal of trouble in store, for the condition of affairs in September, 1897, produced the infection of 348 houses in December. Almost the entire city was encompassed, and the opening of the schools made me fear that there was considerable trouble brewing. Fortunately, the system was already in effect, and even in October we began to see some influence. In October of 1897 there were 227 houses infected; in October, 1898, there were 277; in November, 1897, there were 315 houses infected, and in November, 1898, there were 302. When it comes to December, 1897, we find 348 houses infected, while in December, 1898, there were 186, and if I had my maps here for January, you would see that the drop was even greater. It was more than 50 per cent. of the number infected in 1897, the same month. In January, 1899, we find the drop was less than 50 per cent. of January, 1898. I think the conclusions were fair in anticipating trouble.

In putting these things into effect, I recognized, as I have already stated, that it was an exceedingly delicate matter. The public, most of them, do not want the cards on the houses, except when it is on the neighboring houses. This, however, is nothing more than human nature; we are all the same. In some cases the cards were appreciated. One person thanked the officer (and the thanks were always remembered as a sort of oasis in the desert) for putting the card on the door, because she at last had peace from the ringing of the door bell by fakirs or sellers of goods. Another one thanked one of the officers, because she was at last free from the meddlesomeness of her neighbors inquiring into her family affairs, and in one case the card stayed up for about six weeks, the officer not having been notified to take it down, and we found upon inquiry that the house was occupied by a colored family, and that

they could not be turned out for not paying the rent as long as diphtheria was in the house.

Dr. Stokes will follow with a paper, which will be much more interesting to most of you, as it goes more into detail. I would like to call your attention for a moment to the results that were produced by immunizing. Of all the cases that were immunized, two developed diphtheria. I feel absolutely sure that diphtheria has no chance whatever to gain a foothold in the city of Baltimore, such as it has had, if such processes as I have outlined are carried out. In 1897 there were 1011 more cases of diphtheria than in 1896, and this year there were a great many more. The death-rate, however, is less this year than last, and last year was less than the year before, and I believe it was due to the use of antitoxine and to immunizing.

THE MANAGEMENT OF DIPHTHERIA FROM A PUBLIC HEALTH STANDPOINT.

By Wm. Royal Stokes, M.D.,

Bacteriologist to the Health Department and
Associate Professor of Pathology, University
of Maryland, Baltimore.

READ BEFORE THE CLINICAL SOCIETY OF MARYLAND,
JANUARY 20, 1899.

IN addition to the routine examination for physicians, a number of cultures have been made from the throats of children living in houses where diphtheria has existed. This has been rendered necessary by the city ordinance which prevents the return of children to school who have been living in a house where diphtheria exists until the throat of every child in the house has been declared free from diphtheria. It has been well known for some time that the germ of diphtheria will remain in the throat from three to four weeks after all other signs of the disease disappear, and, of course, a convalescent from diphtheria should never be permitted to return to school until the culture from the throat has been declared free from diphtheria germs.

Recent work has also shown that it is necessary to examine the throats of all

the children in a house where diphtheria has existed before they are allowed to return to school. This must be done, because a certain number of children in these infected houses will be found to have virulent diphtheria germs in their throats. These germs, even when taken from healthy children, will often cause the death of guinea pigs, from experimental diphtheria, and they are capable of infecting other less resistant persons with diphtheria. It is obvious, therefore, that where several children in a house are exposed to diphtheria, that one child may develop the disease, several other children will escape, but often one of these, although remaining healthy, may show a pure culture of the diphtheria germ in his throat. These cases of unsuspected bacteriological diphtheria are one of the most prolific causes of the spread of diphtheria, and it is of the utmost importance to examine every throat in an infected household before its inmates mix with the public and the children return to school.

His Honor the Mayor and the Health Commissioner, having recognized the importance of this work, have appointed an inspector of throats, whose duty it is to take cultures from the inmates of houses in which diphtheria has existed. The house is not disinfected, nor are the children allowed to return to school, until all the throats are found to be free from diphtheria bacilli. The present incumbent of this position, Dr. Charles Canby, by his painstaking work, has already demonstrated the importance of this position. Out of 1741 children in infected houses whose throats have been examined, eighty-six were found to contain diphtheria germs.

The bacillus of diphtheria is not a normal inhabitant of the throat, according to Park. In his report on Bacteriological Investigations and Diagnosis of Diphtheria from May 4, 1893, to May 4, 1894, Scientific Bulletin No. 1, Health Department, City of New York, he found diphtheria bacilli in about only 1 per cent. of the healthy throats examined in New York city. Most of these cases were traced to houses infected with diphtheria. He concluded that the children in such houses should be considered sources of

danger until cultures show the absence of diphtheria germs. Our own experience in Baltimore has led to similar conclusions.

Another important series of investigations has been carried on in connection with the public schools. In several instances a direct history has been obtained of the presence of a diphtheria case in school. The throats of all the children have been examined immediately for diphtheria germs, and in Annex School No. 16 twenty-two children in 256 examined for diphtheria were found to have diphtheria germs in their throats. Other isolated cases have also been detected in schools or other public institutions. Out of 942 school children examined, sixty-five were found to contain diphtheria germs in their throats.

DISINFECTION.

Formaldehyde gas has been used by the department in order to cause a surface disinfection of rooms in which diphtheria and scarlet fever have existed. In order to prove that the disinfection was complete, it has been the custom to expose specimens of harmless germs in the room during disinfection. If these germs were later found to have been destroyed, it was assumed that the room was free from any further danger of contagion. Owing to the press of more important work, and lack of assistance, this process of testing the disinfection was discontinued during the last few months, but the laboratory is again carrying on the tests.

The gas has been generated by means of a Schering lamp and paraform tablet, a 1 gramme tablet being used for every twenty cubic feet of air space. Where it has been found possible to properly stop the cracks in the windows and doors, this amount of gas has been found to destroy the best cultures. It should be borne in mind that formaldehyde is only a surface disinfectant, and that such bulky structures as mattresses, pillows, etc., cannot be properly disinfected by this gas. These solid materials can only be properly disinfected by a vacuum steam sterilizer, and such a machine is most urgently needed in this department, as at present there is no provision for such work in the city.

THE USE OF ANTITOXINE IN THE TREATMENT OF DIPHTHERIA.

One of the most important functions of the department has been the free distribution of antitoxine in indigent cases of diphtheria. Where the circumstances rendered the complete isolation of the case impossible, antitoxine has been used in order to immunize all of the children in the house. The results of both practices have been very gratifying, and in addition to the saving of many lives, which would otherwise die of diphtheria,

the spread of diphtheria has also been restricted. It has been the custom to use 1000 units of antitoxine for immunization, and 2000 for treating a case of developed diphtheria. This has been often followed by from 1000 to 2000 units in from twelve to twenty-four hours, if the case does not show decided improvement, and in a number of cases from 7000 to 10,000 units have been used in treating a case. In one case 15,000 units were used, 2000 being introduced every twelve hours.

CASES OF DIPHTHERIA TREATED WITH ANTITOXINE FURNISHED BY THE HEALTH DEPARTMENT OF BALTIMORE, FROM APRIL 4TH TO DECEMBER 31ST, 1896.

Cases.	Deaths.	Mortality Percentage.	Extent of Membrane.					Complications.					Diphtheria Bacilli Found.
			Tonsils.	Tonsils and Pharynx.	Pharynx.	Nose.	Larynx.	Broncho-Pneumonia.	Nephritis.	Sepsis.	Paralysis.	Cardiac Paralysis.	
387	47	12.14	186	72	41	17	53	2	4	10	13	9	288

Cases in which diphtheria bacilli were found.....	288
Deaths among these cases.....	30
Percentage of mortality.....	10.41
Cases immunized.....	256
Immunized cases developing diphtheria.....	2

Laryngeal diphtheria.....	53
Deaths.....	20
Percentage.....	37.73

MORTALITY AFTER ANTITOXINE ACCORDING TO THE DAY OF DISEASE.

Day of Disease }	1st day.		2d day.		3d day.		4th day.		5th day.		6th day or later.		7th day.		8th day.		10th day.	
	Cases.	Died.	Cases.	Died.	Cases.	Died.	Cases.	Died.	Cases.	Died.	Cases.	Died.	Cases.	Died.	Cases.	Died.	Cases.	Died.
	88	4	78	3	37	4	23	4	12	2	5	2	8	2	2	1	1	4
Percentage of Mortality.	4.41		3.84		9.75		14.81		14.28		28.57		20.		33.		80.	

The above table shows in 387 cases which were considered diphtheria by the physicians who applied for antitoxine that forty-seven deaths occurred, a mortality of 12.14 per cent. In 288 of these cases diphtheria bacilli were demonstrated by cultures and only thirty cases died, a mortality of 10.41 per cent. In fifty-three cases of laryngeal diphtheria thirty deaths occurred, a mortality of 37.73 per cent. Out of the 256 cases immunized in infected houses a subsequent history showed that only two cases developed diphtheria. The latter half of the table shows the importance of giving antitoxine at the earliest possible moment, as the mortality becomes greater as its administration is delayed. Although these con-

clusions are based upon a small number of cases, they correspond to the reliable deductions drawn from much larger statistics. Antitoxine was little used in Baltimore in 1896, and the mortality from diphtheria in this year was 51.87 per cent.

ISOLATION HOSPITAL.

In order to prevent the spread of diphtheria it is, of course, necessary to have an isolation hospital for the treatment of this disease. We have no such institution in Baltimore, and, although the City Council has appropriated a small sum of money for starting such a hospital, the building will be prevented by a tiresome series of injunctions, unless the physicians insist upon the truth of one simple fact. This can be briefly stated by saying

in public and private, by committees and in the public press, that an infectious hospital for diphtheria is not a danger, but a protection to the community. One case of diphtheria in many private families is more dangerous to the surrounding public than 100 cases in a well-regulated isolation hospital. Most of the modern infectious hospitals are in thickly-settled portions of the city, where the cases can be quickly transported, and in this way unnecessary exposure is avoided. The physicians of Baltimore can secure an infectious hospital if they will act together, and, in conclusion, I would say that they should constantly insist upon the fact that an isolation hospital is not a danger, but a protection to a community.

SUPPURATION OF THE MIDDLE EAR, COMPLICATIONS AND CONSEQUENCES, WITH REPORT OF ILLUSTRATIVE CASE.

By Dr. A. D. McConachie.

Surgeon to the Presbyterian Eye, Ear and Throat Charity Hospital, Ophthalmologist to Bay View Asylum, Baltimore, Md.

READ AT THE MONTHLY MEETING OF THE OCIL COUNTY MEDICAL SOCIETY, AT ELKTON, MARYLAND, JANUARY 11, 1899.

(Continued from page 38.)

Treatment.—Beginning with the so-called earache.—The first indication is to relieve the most prominent symptom—pain. For this purpose the most valuable of all remedies is heat, preferably dry heat. The sufferer should lie on a hot-water bag or bag of hot salt. This treatment is somewhat objectionable, because lying upon the affected ear increases pain. The hot-water bag or bag of salt is rather heavy to apply to the ear by any other method than lying on it, and for this reason several pieces of flannel, well heated, or a hot bran bag, because of their lightness, answers a better purpose.

Drugs dropped into the ear for relief of pain should be dissolved in oil rather than water, as the auditory canal and drumhead are covered by skin, and oily solutions penetrate the epidermis better than water. The usual prescription of equal parts of sweet oil and laudanum is

objectionable, because vegetable oils become rancid in a warm place, as in the auditory canal, and hence are a source of increased inflammation.

An ointment of 5 to 10 per cent. of cocaine, in lanoline, is the safest and best. It, to a limited extent, is antiseptic, not rancid, and keeps up a constant contracting of the blood-vessels, due to the cocaine, and greatly reduces the inflammation. The ointment should be melted and dropped into the ear while warm.

Equally effective for the relief of pain, ringing and deafness is gentle inflation by the Politzer bag, in adults, or by means of a rubber tube, with glass tube ends, in children. One end is inserted into the nostril of the child, the other into the operator's mouth, and both nostrils of the child are closed by the thumb and finger. The child is asked to puff out his cheeks while the physician gently blows into the rubber tube, and air enters both middle ears. This restores the intratympanic pressure and dislodges mucus. Less force is needed in children than adults, as the tubes are relatively shorter and wider.

We must be on the alert for repeated attacks; hence treatment between the attacks is to be prescribed as to the care of the child's general condition, instruct as to child's dietary, clothing and sanitary welfare. Naso-pharyngeal obstruction predisposes the patient to recurrent attacks, each attack leaving the patient somewhat deaf for a time; gradually the deafness assumes a permanent character, unless the underlying nasal or naso-pharyngeal condition is removed. In children adenoids, enlarged tonsils and simple chronic nasal catarrh are the most common causes of earache, whilst in adults the hypertrophic variety of nasal catarrh is common.

In children, proper clothing, sunlight, fresh air, are of primary importance. The child should be taught to properly blow its nose. In young children it is frequently impossible to get them to blow their noses. In these cases the nose should be blown for them two or three times daily by the Politzer bag or rubber tubing (described) by inserting in one nostril and blowing the mucus out of the other. Alkaline washes or sprays, as Do-

bell's, Seiler's and other preparations, are useful for cleansing the nostrils, but in children terrifying and difficult to use, and only partially effective when the mucus is tenacious. After blowing the nose or cleansing it, it is my habit, in children, to insert into each nostril an ointment of gallic acid in vaseline, grs. 10-oz. 1, which speedily arrests the secretions. In adults a spray of camphor menthol, one-half or 3 per cent., in albolene or any of the petroleum oils, is a good antiseptic, checks discharges and corrects perverted secretions.

Adenoids should be removed. Hypertrophy of the tonsils should be reduced by partial removal, but when only partial obstruction exists many times permeability of the respiratory apparatus may be established by tri-weekly applications to the nose and naso-pharynx of iodized glycerine on a mop, grs. 10-oz. 1. Politization and massage should be continued after the acute attack is over to break up adhesions and restore hearing. When the exudation is excessive and drum bulges, especially on purulency supervening, immediate opening of the drum should be done to prevent rapid destruction of tympanic structures. The pain ceases almost immediately after the exit of pent-up secretions. The discharge should be washed away by syringing the ear with warm boric acid solution or bichloride solution, 1-5000, and the ear wiped dry, gently inflating with Politzer bag to drive out any retained exudate, then gently insufflate boric acid powder, but not enough to block the canal. This should be renewed daily or more frequently if discharge continues.

In the event of the discharge continuing, and the opening in drum too small, enlarge it. If chronicity supervenes, polypi, granulations and carious ossicles must be removed and the tympanic cavity curetted.

Mastoid involvement is indicated by a history of profuse discharge suddenly slowing and pain either spoken of by the patient or elicited on pressure over the mastoid antrum or tip, with fever ranging from 100° to 105°, with or without redness or swelling over the mastoid. These symptoms would indicate opening

the mastoid antrum, curetting and radically removing the contents of the tympanum.

In chronic suppurations our efforts should be: (1) Remove thoroughly all secretions from the drum cavity and meatus; (2) Establish drainage; (3) Check discharge and bring about granulation and cicatrization.

Cleanliness is best accomplished by syringing the ear thoroughly with warm, sterilized boric acid or bichloride water. Crusts, inspissated pus and cerumen may be removed with cotton or a blunt probe or curette. Collections in the attic are best removed by use of the attic syringe. After syringing, the ear is inflated, so as to eject any possible secretion remaining in the Eustachian tube or middle ear. The parts are then dried with absorbent cotton and a coating of boric acid is dusted over the surface of the middle ear. After a few treatments of this kind it is advisable to resort to the simple dry method, relying on mopping with absorbent cotton, inflation and the powders, for cases often improve more rapidly under the dry than the wet treatment. The discharge may cease after the first few treatments.

Many other remedies are commonly used, but my experience has been that these are the most efficacious for the purpose. Iodoform is good, but the odor objectionable. Nitrate of silver, in varying strengths, may be used, but is inferior to remedies less objectionable. Zinc sulphate has but little action and does not merit confidence.

In more intractable cases, due to red, thickened, tumefied and bleeding mucous membrane, it is difficult to use the dry method owing to pain produced by manipulation. It is best, then, to syringe; then hydrogen peroxide is dropped into the ear, with head inclined, first being gently warmed and allowed to remain in the ear until effervescence ceases. The liberated oxygen decomposes pus corpuscles and dislodges debris, and by its mechanical action brings away materials that even syringing fails to dislodge. When the perforation is high up, and attic retention is suspected, the opening should be enlarged. The presence of

granulations in the middle ear or in the drumhead protracts the cure; if small, instillations of pure or diluted alcohol will shrink them up; this is to be done after cleansing and allowed to remain in ten minutes, and the treatment concluded with boric acid. When the granulations are large, suggestive of beginning polypi, they are best removed under cocaine by the curette. Chromic acid may also be used. Polypi, when present, should be removed by the forceps or snare and the attachment cauterized by chromic acid to prevent recurrence.

Caries and necrosis, due to denudation of the periosteum, require much patience. After thorough syringing and use of hydrogen dioxide, the tympanic walls should be curetted, and the odor soon gives way to one of carbolized glycerine, alcohol, iodoform or bichloride solution. Necrotic ossicles require removal by severing their attachments, and any remaining in the drum membrane may then be removed by forceps.

Deafness following suppurative processes calls for treatment after the suppuration ceases. Inflation by the Politzer bag, to overcome adhesions between the ossicles and the walls of the tympanum, should be practiced three to four times weekly, or the middle ear may be medicated at the time of inflation by use of Globe nebulizer, using a bland petroleum oil, with menthol camphor and iodine. These remedies soften the dried and hardened tissues and promote mobility.

Massage by the finger or some of the many masseurs may be used—Siegel's speculum, Delstanche's masseur, or, what I personally prefer, after long and thorough trial, a masseur (Jackson's pneumatic) propelled by electric motor, giving 150 vibrations to the minute. During an extended trial with this instrument I have seen mobility of the drum and ossicles established, hearing improved and tinnitus either disappear or be much modified after failure of other methods. The method is best pursued for three or four weeks, or as long as any perceptible improvement is observed, and the patient dismissed, with instructions to return, if any diminution in hearing is noted, for further treatment.

The report of a case illustrative of what has been said may be found instructive:

On August 29 last a boy, aged seventeen years, came to me with the following history: Left ear discharging for ten years, result of "cold in the head." He had been treated variously at different times, but there still continued a discharge of a foul, offensive nature, which caused him to seek further relief. On examination I found the canal filled with foul-smelling accumulations, epithelium, pus, etc. After removal, I found the drum membrane gone, except a small fringe above, holding the malleus, mucous membrane reddened and tumefied. Hearing was reduced to watch at two inches. The offensive smell and continuous discharge, after thoroughly cleansing, suggested necrosis of the ossicles and tympanic wall. I did not temporize with medical treatment, but suggested surgical intervention at once, after explaining the impossibility of a hopeful result by other treatment and the risk he was running by a possible abscess formation in his mastoid. At this time there was no positive evidence of any mastoid involvement, except slight tenderness on pressure over mastoid antrum. The patient submitted to the operation, which was done under cocaine anesthesia, and the malleus and incus were removed and tympanic cavity curetted and the whole thoroughly cleansed and boric acid insufflated and patient dismissed, and left for his home in West Virginia, with instructions for cleansing, etc.

All went well, and the boy resumed his school duties, until September 29, when he was seized with a chill and high fever, for which he was treated by his local physician, until his return to Baltimore, October 5. On entering the Presbyterian Eye, Ear and Throat Hospital he presented a much emaciated, cadaverous look, being reduced in flesh from 165 pounds to 130 pounds or thereabouts, unable to walk. Temperature, 105.5°; slight discharge from the ear; large, hard swelling below the ear and extending to the clavicle; very little swelling or redness over the mastoid tip or antrum; much pain; acute infection of the mastoid, with gravitation abscess in the neck,

due to perforation of the bone of the digastric fossa, was immediately suspected, and opening of the antrum advised. The father wished postponement for a day and the usual antiphlogistic measures used, *c. g.*, leeches over the mastoid, Leiter's coil to the mastoid, and purgative of calomel and Epsom salts. The next day, October 6, his temperature was still 105.5° , with rigors and profuse sweats. Immediate operation was advised, and the boy prepared with the usual aseptic precautions—shaving of the scalp over the left half of the cranium, scrubbing with soap and water and washing with ether and alcohol, and the canal thoroughly cleansed; instruments sterilized by boiling and immersion in carbolic acid solution.

An incision extending from the tip of the mastoid, close to the attachment of the auricle to a point above the auricle, immediately over the center of the external meatus, down to the bone. The auricle, skin and periosteum were retracted and hemorrhage checked by forceps and hot water. The mastoid was found dense and healthy. An opening was made with a chisel and mallet over the antrum at the usual site—the suprameatal triangle—and on gaining entrance to the antrum through a half-inch of dense bone pus and blood welled up. The opening was enlarged downward toward the tip and inward toward the tympanum. I found the lateral sinus exposed and pulsating and bathed in pus. The cells were thoroughly curetted and washed, and the middle ear syringed from the antrum through the aditus, made evident by the fluid passing through the aditus and out of the external auditory canal. I did not deem it necessary to go into the middle ear more radically, as is the custom when necroses of the ossicles and tympanic walls are suspected, as I had previously removed these necrotic tissues.

The wound was packed with iodoform gauze and patient bandaged and put to bed. That evening his temperature dropped to 103° , and on the morning of the 7th to 98° ; evening, 101° . The wound was dressed next day and succeeding days, his temperature running from 99° to 101° . On the eighth day after op-

eration his continued fever, with pain and swelling in the neck, suggested opening his neck, which was done on the 14th inst., the wound being extended downward beyond the tip of the mastoid and the sterno-cleido severed and the tip pinched off, permitting the escape of an immense amount of pus from the neck. From this time on his temperature remained normal, until his dismissal the latter part of November, the wound granulating kindly and the discharge ceasing from the ear, with restoration of hearing to the watch at eighteen inches.

Society Reports.

CLINICAL SOCIETY OF MARYLAND.

MEETING HELD JANUARY 20, 1899.

DR. JOHN S. FULTON, secretary of the State Board of Health, read a paper entitled "The Relation of Public Health Officers to Practicing Physicians" (see page 43).

Dr. William R. Stokes: As Dr. Fulton says, the specimens for the examination of sputum, diphtheria, typhoid, etc., come in in a hundred different ways, and it would certainly aid the Health Department very materially if the physicians would only take the trouble of filling up the blanks, which are to be found in at least one drug store of every ward, and the drug store of each ward can easily be ascertained by telephoning to the Health Department. I would certainly like to request that the physicians in reporting these cases of tuberculosis, diphtheria, typhoid and scarlet fever, do so through the proper channels.

Dr. William J. Todd: Referring to the reporting of contagious diseases to the Health Department, I should like to say that the average patient does not understand why the case is reported. For instance, take a case of diphtheria. I make a culture and send it to the Health Department. I have taken something from my standing in that family. "Why, doctor," they will say, "cannot you make a diagnosis of diphtheria? Must you refer it to someone else?" The report comes back that it is not diphtheria, and still my ability is questioned. This is one objec-

tion to having these examinations made; at the same time I believe in making the examinations. Take, again, another case, or probably this same case of diphtheria. I tell the parents the child may go to school. The health officer says, when he goes to the school, that the child must go back home again—again breaking down the influence of the physician in that family. These are points that have come up in my own practice; and while I say I believe in these examinations, at the same time I think it takes away from the standing of the physician in the family in which he practices.

Dr. Fulton: The physician certainly makes an error if he by any means loses confidence in his own diagnosis. If a specimen is sent to us and we fail to find the diphtheria bacilli, it simply means that we did not find it. As to the matter of sending children home from school, the practitioner is in error when he gives any advice on the subject. The utmost in a case of scarlet fever that a physician can be required to certify is that the fever has disappeared, and the rest be left to the authorities, and with diphtheria it is manifestly proper that children should be excluded from the school until the diphtheria bacilli have disappeared, as shown by two successive negative examinations.

Dr. Todd: Dr. Fulton's answer does not cover the point that I make. I make a diagnosis of diphtheria, and say that I will ask the bacteriological laboratory to help me out; the report comes back, and invariably the parents will ask what the report is, and I have to either show it or falsify; thus you can see the position in which I am placed. It may be that I have a case of diphtheria, but the report comes "no diphtheria," and I cannot report that I have a case of diphtheria, because the Health Department has said that I have not. I want it distinctly understood that I am in favor of these examinations, but I want to find out in some way how to get over this objectionable feature of it.

Dr. Fulton: Neither the department of the city or State assume to say that any case is not diphtheria, tuberculosis, typhoid or malaria. It does assume to say, however, that the physician sent bacilli of a certain character. Physicians have it largely in their own hands as to how far

they discount their own skill by referring to the department. These methods of investigating are not for the purpose of making a diagnosis, but for the purpose of securing scientific information. I do not think the department assumes to make absolute diagnosis without seeing patients, and I hope the time will never come when it does assume to do so.

Dr. C. Hampson Jones, Health Commissioner of Baltimore, read a paper entitled "The Health Department and Diphtheria" (see page 45).

Dr. William Royal Stokes, city bacteriologist, read a paper entitled "The Management of Diphtheria from a Public Standpoint" (see page 47).

Dr. C. Urban Smith: There are unquestionably a great many cases of diphtheria not reported. I know of three cases, and I got hold of them by coming in contact with diphtheria cases and being told by them that certain friends of theirs did not have a card on the door. I found it really was the fact. Two of these cases happened with a homeopath, though I cannot find out who the doctor was. Some men do this right along, but I do not know how they get out of it. I think it a very important matter, indeed, the reporting of these cases to the Health Department, and I believe we ought to take it in hand, and where we can get proof that a man does not report his cases we should make it known.

Dr. Charles O'Donovan: I think that we can be perfectly unanimous in regard to the importance of reporting cases to the Health Department, but I feel compelled to take exception to the use of the yellow cards in the cases of diphtheria. Certainly where we have a case of diphtheria it is a matter of importance that the Health Department should know it and try to prevent its spread, but the question I wish to ask is this: Does the use of the yellow card, as it is placed upon the door of a house, prevent the spread of the disease? A man is marked for months if it is known that he has had diphtheria and his business probably ruined. If he is a clerk, the information is likely to get to his employer, through some kind friend, and as a result he loses his position. Now, is there any positive gain? I think a physician who under-

stands what he is about, by using the necessary precautions, can obtain perfect isolation in almost any house. Suppose a case of diphtheria break out in a large apartment-house—the Severn, for instance—do you think it a matter of justice to place on the door a yellow card announcing that it is an infected house? That anyone entering the house would take the disease?

Dr. A. D. McConachie: It is just that phase of the question I had in mind in making the programme of this meeting—to try to reconcile the antagonistic physicians toward the efficient Health Department. I believe we have an efficient Health Department, that is struggling for the best interests and welfare of this city. They may be hampered by public opinion, but I hope not by members of the medical profession. We should co-operate with our Health Department. If the cases are not reported, whose fault is it? It is the physician's fault. If they are reported from the poorer sections of the city, they are reported by physicians; if they are not reported from the better sections of the city, they are not reported by the physicians; then the physician is co-operating with an ignorant public. As to the use of the yellow card, it is the best means we have at present, and let us use it until we can get something better. Let us at least make use of this method for stamping the house of infectious disease, unless we want the infectious disease to spread.

Dr. O'Donovan: But what is gained by putting up the yellow card? If you say report as you used to do, the cases will be reported. I have always reported my cases.

Dr. A. K. Bond: There is an amount of innocence in this association that is beautiful and refreshing. Dr. O'Donovan thinks every physician is as particular about reporting his cases as he is, and Dr. Stokes, in his paper, seems rather surprised that his disinfecting men get a little careless when he does not watch them. I am glad that we have the Health Department represented by the men we have. The Health Department has the thanks of every physician in this city, whether the people thank them or not. I quarrelled for years with the predeces-

sors of these gentlemen. We did everything we knew. We said that the health office was a farce, and it was. I am surprised to hear that Dr. Jones' inspector of throats is a physician, and not an ex-saloonkeeper. Things are improving, and I, personally, am thankful for it, and I am going to take up for the Health Department as thoroughly as I can. The yellow card is not to frighten everyone, but to notify the person about to enter that there is diphtheria in the house, and it can be done easily and in such a way as not to offend. I should like to know where the culture tubes can be obtained. I have gone to a drug store in a prominent part of this city and asked for them, and they did not have them. Could our health officers not have a drug store in each district where they were compelled to keep them on hand? I think we ought to have them within reach.

Dr. J. D. Blake: I fully agree with a great deal that has been said. I would like to say, though, that the Health Department does distribute culture tubes. Dr. Bond was unfortunate in striking a drug store where they were not kept, or, perhaps, the unfortunate part was that the Health Department did not notify our friend where they kept the tubes. I do not exactly agree with all that has been said. With regard to the duty of physicians toward the Health Department, I am sure every physician desires to see the Health Department perform its offices in a proper and legitimate way. Now, the Health Department, as at present existing, is a good one, striving to do good work, but that is no reason why it is not liable to make great mistakes. What Dr. O'Donovan has said, he has said with a great deal of force and truth. There is no doubt that this yellow card is as liable to do harm as good.

Dr. W. T. Watson: I would like to say that I think the public has a right to know where these diseases are located. The mothers of little children should know whether or not there is diphtheria in houses where there are stores. I know of one case where a woman kept a confectionery store, and she had a little child with scarlet fever. I have seen that woman leave the child, while I was there, and run out to sell candy or chewing-gum

to some child, and people in that neighborhood never knew there was scarlet fever in the house. I think the mothers of that neighborhood should have known there was scarlet fever there, but at that time there was no card system. I have seen similar instances in cases of diphtheria, where the parents would handle the child and then go out to wait on customers.

I am convinced that all the money that the city has spent in the disinfection has been badly spent. I do not know of a case in which a single room has been thoroughly disinfected after diphtheria, and in no case did they destroy the germs of the disease. The members of the Health Department promised to do better, and I made a couple of more tests. We exposed some tubes and afterwards made cultures from them, and the germs grew in great quantity, and from inquiry made of the householders as to the manner of disinfection, I am convinced that the men did not disinfect the house properly. I am convinced that the money has been worse than thrown away, because after the family feel secure they do not do as much scrubbing and cleaning as they otherwise would do. I should like to ask Dr. Stokes and Dr. Jones if they have ever gone to a house and superintended the disinfection of a room. If some of the officials do not go and give instructions, they will never get a room properly disinfected. In my section of the city most of the houses leak, and before they can properly disinfect the room they must find some way of stopping up the cracks, but so far they do not do it.

It was my privilege to visit the Hospital for Infectious Diseases in Boston, and was very much pleased with the institution. They have a private ward for scarlet fever, another for diphtheria, one for measles, another for measles and diphtheria, and the various combinations of these diseases. It seems to me they must have a corps of nurses, one nurse for each department, otherwise the nurses will carry infection from one department to another.

I want to thank the Health Department for the antitoxine that I have received for the last year or more. I am

sure I have thus saved lives and prevented many cases of diphtheria.

Dr. C. Hampson Jones: I assure you that I am well pleased with the consideration you have given the remarks of the health officers of your city. Many of you were not here in time for my preliminary remarks, but I assured you then that we were fully aware of the difficulties that you and the public and the Health Department have to contend with.

With regard to the diagnosis of diphtheria, please remember that the sending of cultures to the department is not a notification of the disease. As you know, the culture may not be a true one. When we find the germs present, we, of course, act immediately.

Dr. Watson is perfectly correct when he says that the system of disinfection is not perfect, nor is it anywhere near perfect, but it is the best we can do just at present. I, being at the head of the department, cannot possibly go around and see that each one is properly done; but if the city had given me what I asked for this year we would have had someone to superintend this work. I know that up to this year the number of disinfections was very much less.

In regard to the card, again, we know it is annoying, and it will be done away with just as soon as it possibly can; but, knowing that the people would not notify us to come and do what poor disinfecting we do, I determined to use a system that would make them notify us—that is, put the card there. I do know that the reporting of cases this year was very much better than in 1897, but, unfortunately, there are some who will not do it.

BOOK AND JOURNAL CLUB OF THE MEDICAL AND CHIRURGICAL FACULTY.

ANNUAL MEETING HELD JANUARY 25, 1899.

THE meeting was called to order, with Dr. Wm. Osler, president, in the chair, and Dr. Harry Friedenwald, secretary and treasurer.

Dr. Henry M. Hurd presented, for Mr. George W. Archer of Harford county, a portrait of Dr. John Archer, the first medical graduate of this country, and read and interesting history of his life. Of

especial interest was the record of his work while a student in Philadelphia at what is now the University of Pennsylvania. He took his degree, with nine others, in 1768, and as the diplomas were conferred alphabetically Dr. Archer was literally the first graduate. His diploma, which has been in the possession of the Faculty for some time, was also shown.

Dr. Osler then presented a portrait of Dr. Thomas H. Archer, the son of Dr. John Archer.

Dr. George J. Preston then read an exceedingly interesting paper on "Medical Biography," and briefly went over some of the works on medical biography which have been acquired by the Faculty. His paper will be published in a subsequent number of the JOURNAL.

Dr. Osler said that the Messrs. Frick and Mr. Reverdy Johnson had again given money to the library, and he referred to the need of more members to the Book and Journal Club, and urged the profession to join. He also asked for any portraits or pictures of prominent medical men of Baltimore and Maryland for the loan exhibition in April. He said that the rapid and gratifying growth of the library during the past three years has been due in part to the Frick Fund and in part to the voluntary subscriptions of the members of the Book and Journal Club. Of the \$1000 appropriated annually by the Faculty for the library fully one-half is used for general expenses. The remainder was spent last year in payment for forty-three journals, twenty-three books and the bill for binding. The Frick Fund added 342 volumes, chiefly new books and valuable sets of reports. The Book and Journal Club subscribed for fifty-five journals and gave twenty-two new books.

The club thus supplements in a most important way the work of the library. The subscription represents a voluntary tax on those members who feel they can afford it. There was a falling off in the membership last year; only a small number joined.

Dr. Harry Friedenwald said that \$490 had been received in the past year, of

which \$121 had been expended for new books and \$333 for journals, and since the opening of the club, three years ago, \$1620 had been received, of which \$664 had been expended for new books and \$829 for journals. The same officers were re-elected.

Dr. W'm. Osler then described his visit to the birthplace of Sydenham in Dorsetshire, England, and showed two views of his birthplace. He will present these views to the Faculty.

Medical Progress.

NEPHRITIS OF MALARIAL ORIGIN.—

In an extended study of malarial nephritis in the American Journal of the Medical Sciences, Dr. William S. Thayer draws the following conclusions:

1. Albuminuria is a frequent occurrence in the malarial fevers of Baltimore, occurring in 46.4 per cent. of our cases.

2. It is considerably more frequent in estivo-autumnal infections than in other forms, occurring in 58.3 per cent. of these instances against 38.6 per cent. in the regularly intermittent fevers.

3. Acute nephritis is a not unusual complication of malarial fever, having occurred in 2.7 per cent. of the cases treated in the wards of the Johns Hopkins Hospital, and in between 1 and 2 per cent. of all cases seen at the institution.

4. The frequency of acute nephritis in estivo-autumnal fever is much greater than in the regularly intermittent fevers, having been observed in 4.7 per cent. of the cases treated in our wards, and in 2.3 per cent. of all the cases seen.

5. The frequency of albuminuria and nephritis in malarial fever, while somewhat below that observed in the more severe acute infections, such as typhoid fever, scarlet fever and diphtheria, is yet considerable.

6. There is reason to believe that malarial infection, especially in the more tropical countries, may play an appreciable part in the etiology of chronic renal disease.

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MARYLAND MEDICAL JOURNAL,
Fidelity Building, Charles and Lexington Streets,
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BALTIMORE, JANUARY 28, 1899.

WHILE this country is free, often almost too free, there is gradually appearing a touch of paternalism which is greatly to our credit. Some think that those who will not take care of themselves and their health should be taken care of, and the health authorities of many of the more modern cities and States do actually give much attention to the health of their people.

In this issue the report of the Clinical Society of last week is given, and the work which has been done by the State and city health authorities is ably explained by the writers. If there will ever come a time when the health office of any city or State can be entirely freed from political influences, and when men especially fitted and drilled for their places will be chosen, then the work of sanitation will make great strides. In Baltimore, for example, no health commissioner is certain of his place for a longer time than one administration, and no sooner does he become experienced at the city's expense than out he steps and another man is put in.

The city of Baltimore and the State of Maryland just now have in the various health offices men of ability and integrity, who do their work in a most satisfactory manner and to the best of their ability. As is seen in the report of the city's health of 1898, the death-rate was about nineteen per thousand. The city has been very liberal in furnishing to physicians and others facilities for making a diagnosis of diphtheria and typhoid fever, and in supplying free of charge to those unable to pay diphtheria antitoxine. The city bacteriologist is not only a careful man in his department, but is very prompt in giving information.

The next thing the health office should do is to take some steps to record the cases and deaths of pulmonary consumption. In a population of 541,000 there were, in 1898, 10,385 deaths, of which 1112, or more than one-ninth, were from pulmonary consumption. New York is endeavoring to record houses in which several cases of consumption occur. Such a move is in the right direction. The city will find out later what an inadequate sum has been appropriated for an infectious hospital.

* * *

ONCE more there has been attempted a scheme to compel Baltimore to use filtration plants on the plea that the water is unfit for drinking purposes and can be made fit by filtration. As there are not too many good citizens among the politicians there was danger that Baltimore would be compelled to spend a large sum of money for something not sufficiently understood. It is a great credit to the city council, therefore, that one man at least has the interest of the city sufficiently at heart to demand a full investigation before taking this important step. Mr. John C. Simering has had a commission appointed to look into the condition of the water and see if it is impure and how many bacteria to the cubic centimeter it contains and to report if filtration in the manner suggested will give pure water. The commission contains, among others, Dr. Ira Remsen and Dr. William H. Welch, so that the best talent in chemistry and bacteriology may be obtained for the city's use. Whatever this unpaid commission of honorable men and good citizens recommend will probably be adopted, and it is a great satisfaction to the citizens, and especially to the taxpayers, that there are some good citizens in the city council of Baltimore.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending January 21, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	1	..
La Grippe.....	..	26
Pneumonia.....	..	30
Phthisis Pulmonalis.....	2	27
Measles.....	5	..
Whooping Cough.....	..	..
Pseudo-Membranous Croup and Diphtheria. }	33	7
Mumps.....	..	..
Scarlet Fever.....	4	..
Varioloid.....	..	..
Varicella.....	3	..
Typhoid Fever.....	*3	2

*One (1) case imported from Philadelphia, Pa.

Gurlt, the Berlin surgeon, is dead.

Dr. Alvah H. Doty has been reappointed health officer of New York.

Dr. J. B. Miller, a member of the Pension Examining Board, died recently at Westernport, Md.

Philip Knoll is said to have succeeded the late Stricker in the chair of experimental pathology at Vienna.

There are about 200 members enrolled in the new Tri-State Medical Association of the Carolinas and Virginia.

Enforced idleness in the King's county penitentiary at Brooklyn caused the insanity of six convicts not long since.

Dr. William G. Kidd, who died at Princeton, Ind., last week, formerly lived in Baltimore, where he received his medical degree from the University of Maryland in 1853.

The following are the new officers of the Philadelphia County Medical Society: President, Dr. Solomon Solis-Cohen; first vice-president, Dr. John H. Musser; second vice-president, Dr. George E. Shoemaker.

Dr. J. R. Williamson, of Edinburgh University, a man deeply interested in medical missions, believes there is a fine opening for medical men in the far East where the crudest ideas as to medical treatment still prevail.

Dr. Richard H. Green, a well-known physician and for two years the mayor of Annapolis, died last week, aged sixty-four years. He re-

ceived his education at St. John's College, and his medical degree from the University of Maryland in 1859.

At the last meeting of the Berlin Medical Society, Virchow was again elected president, and Von Bergmann, Senator and Abraham, vice-presidents. It was decided not to admit women physicians. There are 1130 members and a balance in the treasury of over \$32,000.

Dr. John M. Estill, formerly of Tazewell, Va., died last Monday at the home of his son in Lexington. Dr. Estill was born in 1821, and received his medical degree at the University of Virginia. He was at one time vice-president of the Virginia State Medical Society.

A meeting of the various faculties of all the medical colleges of the city of Baltimore, was held at the home of Dr. Howard A. Kelly on Monday evening, January 23, in behalf of the Y. M. C. A. interests. The faculties, together with a number of prominent citizens, were invited to meet Dr. Williamson of the University of Edinburgh and Mr. Beaver, son of ex-Governor Beaver of Pennsylvania, who were introduced by Mr. Eugene Levering, and who came to make a statement as to the importance of securing a permanent medical secretary to look after the interests of the Y. M. C. A. in the respective colleges. The value of such a secretary would be seen not only in the religious work, but in a great many other ways. One of the important services he would render, for example, would be a careful revision of the lists of boarding-houses which are furnished medical students. In some instances these houses have been found to be of the very lowest description. The social gatherings encouraged by the Y. M. C. A. tend also to greatly promote a more cordial interest in college life. As Mr. Levering pointed out, and Dr. Williamson very earnestly emphasized, these are days of co-operation in business matters, and we should be no less ready to take advantage of the power of organization and co-operation. The gentlemen present took immediate action upon the suggestions offered, and have appointed a committee, with a representative from each college, and with Dr. Samuel C. Chew as chairman. This committee is to bring the matter into definite shape and to secure the thorough co-operation of the various faculties. About a hundred and twenty-five guests were present.

Washington Notes.

Major E. O. Shakspeare, brigade surgeon, U. S. V., is in Philadelphia inspecting a new apparatus for the sterilization of water.

At the Society Wednesday evening Dr. D. W. Prentiss discoursed on Bermuda as a winter resort, illustrating with lantern slides, and specimens of natural history.

Sixteen cases of smallpox of a mild type have been reported in Alexandria. The health officer is somewhat embarrassed by lack of funds to properly meet the emergency.

Major Wm. C. Gorges, U. S. A., is ordered to Havana for duty as chief surgeon of that department. Acting Assistant Surgeons F. M. Ferrar and J. M. Delgada have been ordered to report for duty at Havana.

Dr. Godding's letter to Congress, calling attention to the needs of St. Elizabeth's Hospital, states that in June, 1897, the hospital had 1767 inmates; one year later there were 1853, and today there are 1927. At the present time all the rooms are full and there are 100 patients sleeping on cots. The doctor asks for \$31,250 with which to build additional cottages.

Surgeon-General Sternberg recommends the employment of expert female nurses in the army, nurses not to exceed in number 1 per cent. of the army. These nurses are to receive not more than \$50 per month and the chief nurses not more than \$75 per month. The nurses and chief nurses are to be graduates of training schools for nurses.

Owing to the fact that Dr. H. L. E. Johnson is not a resident of Chicago and by no means desirous of severing his connections with Washington he could not accept the position of editor of the *Journal of the American Medical Association*. The doctor is a member of the board of trustees whose duty it is to elect the editor for the Association journal.

The first case of smallpox of the season in this city has been reported, the victim being Rev. Alexander Williams, who had lately visited Alexandria. Many of the persons who called on the preacher at his home have been found and vaccinated and will be kept under observation for two weeks. All persons connected with the case have been removed to the smallpox hospital. Every effort is being made to prevent the spread of the disease.

Book Reviews.

DOCTOR THERNE. By H. Rider Haggard. New York: Longmans, Green & Co.

This novel is a medical missionary tract of great power, and shows the dangers of the conscientious objector. It portrays the fearful outbreak of smallpox in Gloucester, so fresh in all minds, and shows the duplicity of Dr. Therne, whose true character was exposed at the end. There is very little story, and the whole plot hinges on the importance of vaccination. It comes at an opportune time when smallpox is making its appearance again and persons are so unprotected. Rider Haggard has done a great benefit in this novel and has conferred a lasting favor on the medical man.

MESSRS. LEA BROS. & CO. have just announced for publication in March, 1899, the first volume of a new annual, *Medical Progress*, which will be issued in four handsome octavo, cloth-bound and richly-illustrated volumes of about 400 pages each. The several volumes will appear at intervals of three months.

It is announced that the *Revue des Sciences Medicales*, a quarterly review of reviews in medical literature very well known in other countries as well as in France, is about to suspend publication. The *Revue* was established nearly thirty years ago. For the last few years it has been under the editorial direction of Professor George Hayem, the well-known professor at the University of Paris and the author of a number of books and articles on clinical medicine.

REPRINTS, ETC., RECEIVED.

A Clinical Study of Kryofine. By Sidney V. Haas, M.D., and J. Bennett Morrison, M.D. Reprint from the *New York Medical Journal*.

Endemic Leprosy in Louisiana, With a Logical Argument for the Contagiousness of the Disease. By Isadore Dyer, Ph.B. (Yale), M.D. Reprint from the *Philadelphia Medical Journal*.

Upon the Existence of a Minute Micro-organism Associated with Cases of Progressive Portal Cirrhosis. By J. G. Adami, M.A., M.D., F.R.S.C. Reprint from the *Montreal Medical Journal*.

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Original Articles.

WHEN TO PRESCRIBE PHYSIQUE.

By Edward M. Schaeffer, M.D.,
Of Baltimore, Md.

READ BEFORE THE CLINICAL SOCIETY OF MARYLAND,
JANUARY 6, 1899.

PHYSIC and physique are verbally enough alike to be twin-ideas in the practitioner's therapy; indeed, they are etymologically identical. We naturally think of physic in acute, painful affections and grave emergencies. Should we not more frequently call upon the silent partner, the physique, in combatting hereditary or acquired weakness of the physical organism, in relieving many chronic, functional disorders, in strengthening the will-power and in restoring mental equilibrium? Oddly enough, in the institutions of Maryland it has been, as a rule, much easier for the deaf, dumb and blind, the feeble-minded and insane, to be placed under systematic and scientific bodily training than for the growing student or the patient with imperfectly exercised or developed physique to receive the same needed care and instruction. The object of this paper is to suggest that there is a legitimate field for the physical director, working harmoniously with other medical specialists and the general practitioner, in the cure or prevention of disease.

Dr. Hartwell, in Hare's "System of Therapeutics," says: "Physiology in its modern development has thrown much light on the nature and uses of general muscular exercise, but until physicians and clinicians shall have given as much

attention to general exercise as they have to massage, muscular exercise must remain a part of empirical therapeutics, even though there be a considerable and increasing number of men who are capable of making rational use of it. The growing tendency of some of the wisest and most successful physicians to supplement the use of drugs by means of hygiene and dietetic measures is a hopeful one and may ultimately lead to a recognition and determination of rational uses of exercise in the treatment of disease. Speaking broadly, it is hardly possible to discriminate accurately between the hygienic and therapeutic effects of exercise, at any rate when we have to do with certain disorders, such as debility, anemia, neurasthenia, hysteria, obesity and insufficient muscular development. Exercise is as necessary as sufficient and nutritious food for growing children in health, in order to secure normal growth of structure and normal development of function in the various tissues and organs. Similarly, adolescents and adults require a certain amount of muscular exercise to prevent their organs from dwindling in size and losing their full power of functional activity. In ill-nourished, weakly children, on the other hand; in convalescents, recovering from acute or chronic illness, in many cases of brain fog, in some forms of mental derangement, exercise may be employed as a general tonic and prophylactic."

The eminent neurologist, Dr. Charles K. Mills, writing on the general therapeutics of the nervous system, affirms: "Much can be done to prevent the development of nervous affections by careful hygiene and education of children, which should be individualized as far as possible, especially for children with neurotic

tendencies. Education should be as objective as possible. Travel, amusement and natural exercise, skilfully directed, may be made more efficient in the treatment of the nervous and insane than drugs or special therapeutic procedures."

He then speaks of his method of employing systematized, active exercise, with or without apparatus, and urges that it should be as far as possible personally directed by one who is discreet and thoroughly well fitted for his work. Treatment should begin with the simplest forms of exercise and then be constantly increased and elaborated as the patient gains in strength and skill. "The usual respiratory movements should be combined with muscular movements, as on these two powers depends the ability to perform all bodily exercise. Inherent nervous force has also something to do with the capacity to perform bodily exercise. Special efforts of breathing include taking deep, full breaths through the nose and mouth, forced expiration as well as inspiration, counting with a loud voice while holding the breath. The development of the lungs and abdominal walls and the greater aëration of the blood which is conveyed to weak spinal and encephalic centers make them of decided value in cases in which active movements are applicable. In my own practice I have used systematized, active exercise in the treatment of idiocy, insanity, chorea, hysteria, neurasthenia, nervous palpitation, lithemia, diabetes, curvatures, etc. For gout and lithemia, to promote excretion and nutrition; for anemia and spanemia, to assist assimilation and further oxidation; for headache, sleeplessness and nervous irritability, to soothe and calm the nervous system; and for diabetes, to favor the action of the skin and increase combustion, there exercise has a value which cannot be too highly extolled. In hysteria the advantage of any treatment which involves special direction and the adroit calling out of the volition of the patient must be evident. Cases of neurasthenia, melancholia and other nervous troubles will derive much benefit from the wheel, for the wheelman must develop—whether he chooses or not—his will, his independ-

ence, his self-reliance and accurate control of his muscles."

Dr. Charles L. Dana teaches no less emphatically the therapeutic rôle of skilfully directed exercise: "In the treatment of nervous diseases the physician attempts (1) to relieve distressing symptoms; (2) to secure radical cure; (3) to prevent return. This calls for various means, which may be classed under the head of general hygiene, diet, exercise, climate, hydrotherapy, massage, electricity, drugs, etc. To secure and keep steady nerves and to prevent the super-vention of organic nervous diseases would require a considerable reconstruction of the present social system. Children should be brought up to eat slowly a mixed diet, to sleep early and long, to play in the open air, to learn self-control and obedience. Their parents should keep from them all infectious fevers. Adults need to keep in mind but two words—moderation and exercise. With these they need not fear the use of alcohol, tobacco, tea, coffee, or even irregularities in sleeping and eating * * * As a prophylactic against nervous disease the value of exercise, if taken out of doors, can hardly be overestimated."

PULMONARY CASES.

Turning to a large and troublesome class of cases associated with bad physique and impaired nutrition, viz., the pulmonary tubercular group, there comes this voice even from the utterances of a climatological association. Dr. R. C. Newton says: "We are often too ambitious in ordering our patients change of air. They do not need to go a thousand miles or two to obtain fresh air and that change in their way of living which their health demands. They need more hygiene, more exercise, more sunlight and probably a better diet. Regular, systematic, not too severe exercise in the open air every day is what is needed to establish and develop such a constitution in the growing child that he will not be liable to phthisis. Change of climate does not bring change of disposition, nor, for that matter, of predisposition. Precious and even invaluable as change of climate often is in a number of diseased conditions, it is not always what is most

needed. Let us more often be content with smaller doses of climate and supplement them with larger doses of hygiene, both moral and physical."

My attention was first directed to the therapy of general exercise (for I am not discussing medical gymnastics or Swedish movements, strictly so-called) some ten years ago, when a year's experience in sanatorium life gave me an opportunity to test personally and observe quite extensively the decided benefit from regulated exercise drills to the class of patients who frequent such institutions, viz., those of a nervous, dyspeptic, anemic and neurasthenic type. Taking up, later, work among college students, there came a familiarity with the details of modern anthropometry and the thorough methods of looking an individual over from the standpoint of his heredity, life history, physical and mental endowment and special developmental needs. As is well known to many, the physical director first gets acquainted with the personal and family history of his subject through the inquiry blanks which he has filled in, and in his examination lays special stress upon the freedom of chest expansion, the lung capacity as tested by the wet spirometer, the relative weight and height, the development and tonicity of the neck, chest, back and abdominal muscles, general bodily symmetry and the various strength tests on appropriate dynamometers. Sufficient data have been collected and tabulated in the leading colleges and in the public schools of certain cities to form a basis for comparison, so that the young subject may be contrasted with the normal or average of his or her age and height, and any marked deviation therefrom, either in growth or strength, pointed out. This comparison is also of value as a means of arousing the interest or ambition and furnishing a motive for determined effort in bodily improvement. The chief practical difficulty in the way of the ordinary practitioner in prescribing exercise lies not so much in the choice of suitable movements as in sustaining the interest of a patient in his needed development and differentiating useful and pleasurable exertion from the "demnition grind" of monotonous work.

The banker sawing wood in his cellar, the dyspeptic tugging away at the paraphernalia of a gymnasium, the neurotic "doing time" on a much overrated constitutional, the hypochondriac swinging Indian clubs or engineering a pulley weight, are apt to be painfully conscious of the element of work. Nothing seems, at times, more wearisome to the average individual who needs it than a straight-out prescription of deep breathing, *volens volens*, a most invaluable exercise *per se*, but one which arouses considerable physical and mental antagonism when dogmatically, rather than physiologically, administered. The true *besoin de respirer* should be elicited by putting the large muscles of the thigh to work, for example, and creating an urgent demand for oxygen in the system, or by some simple movement of the arms, rapidly repeated.

HEART AND CHEST FIRST.

Modern educational gymnastics differs from the old calisthenics, or gymnastics, in the emphasis placed on the value of chest and heart, rather than general muscular development. The latter is a necessary sequel of the former, but the converse is by no means a reliable rule. The chest has been called the keystone to a fine physique by an authority (Cheesman), who says: "Its development includes that of other parts. No one can perfect the capacity, bony frame and muscles of his thorax without also developing back, loins and limbs. A good chest means good arms and also good legs. Take care of your chest and your limbs will take care of themselves. It may perhaps be asked, if one is well without this, what need of a capacious chest and powerful limbs. While it is true that many undeveloped persons enjoy fair organic health, greater respiratory and muscular power would unquestionably make such lives more effective and longer. A roomy thorax and strong heart are no mean allies in resisting the assaults of disease. A few extra cubic inches of respiratory capacity or a small reserve of disciplined cardiac power may suffice to determine a favorable issue in pneumonia, pleurisy or typhoid. Every inch which a man may add to his chest

measure adds to the measure of his days. These advantages to the individual are, moreover, shared by those who inherit his physical traits."

THE SECRET OF WHOLENESS.

This is largely an era of pre-digestion, not only of food for babies and invalids, but even our mental pabulum is offered in the form of a "literary digest," and perhaps a good deal of our thinking has a warmed-over look and flavor. Under the ambitious greed for overexpansion in some one department of our being we are constantly marring that symmetry and unity of functioning which alone can keep us whole or healthy, sane or sound.

"In what I hold to have been a singularly unlucky day for posterity," says Dr. Bridger, "rather more than half a century ago, there was first separated from the stomach of the pig its special digestive ferment, pepsin," because many persons whose stomachs needed rest, or bodies needed exercise, were hereby enabled to "frank certain foods through the walls of the stomach or intestines, thus interrupting a beneficial blockade of nature." The enormous sale of tonics, alteratives, purgatives, etc., among the well-to-do is evidence of the lack of harmony between the amount of fuel introduced and the actual output of physical energy. "Mental energy, of course, requires good feeding to support it, but though the amount of physical exercise required by the sedentary brain-worker is much diminished, a moderate amount is most essential and should be made a regular habit of the daily routine of every individual." As Chomel expressed it, "A person digests as much with his legs as with his stomach."

WEAK ABDOMINAL WALLS.

Next to the almost universal need of instruction in voluntary deep breathing comes the want of properly developed abdominal walls, especially in women. It seems not a little surprising that the specialists in displaced organs should not preach rather more preventive and curative training through cultivation of the natural supporters of the body's viscera.

No girl's education is complete, nor is she fit for the responsibilities of maternity, with undeveloped trunk muscles. As

women so dread the loss of a good figure through obesity, teach them that their best protection in this regard lies in good respiratory power to burn up excess of fat, and in good abdominal muscles to prevent accumulation of the same.

NEURASTHENICS.

My personal sympathies are especially tendered to that uncrowned martyr, the hereditary neurasthenic, whose sufferings are often as grievous as they are subjective and intangible. By an easy adaptation of one of Ben Franklin's alleged sayings, it may be confidently asserted that the best doctor for such a patient is the one who knows the general worthlessness of most medicines prescribed for that protracted state of irritable weakness.

Exercise and rest go hand in hand in the successful management of most cases, and require nice relative and quantitative adjustment. Each case is a study in itself and calls for the closest attention to details in the daily regimen. The systematic, intelligent, moral support of the physician in charge is hereby best established and maintained. With systematic, gradually increased exercise belong, of course, regulation of the diet, baths, mental diversion, etc. In neurasthenia the nutrition of the nerve cells is principally at fault. Says Dr. Dana: "Many persons with delicately balanced organizations only require some single depressing or irritating agent to put them in a pathological state. This is the case with those neurasthenics who are made so by reflex causes. * * * Of reflex influences causing and keeping up neurasthenia, disturbances of the stomach, intestines and liver are by all odds the most important; next come irritations from pelvic and generative organs." Now, it is in these conditions, with their resulting states of perverted nutrition, that bodily exercise seems physiologically and therapeutically most indicated. "The exercise should not be severe; it should be interesting, it should be done in fresh air, and it should bring into play the lungs and arms more than the legs. Walking does little good, though it is better than nothing."

Again, in breakdown, as Dr. Weber points out, it is a question how much

is due to overwork and how much to the accumulation of waste products in the system from insufficient exercise or too liberal diet. "The great usefulness of exercise in many cases by furthering the oxidation of waste products and toxic materials circulating in the blood is undoubted. * * * It seems probable that metabolism is only very slightly increased by massage in comparison to what it is by active exercise.

SIMPLE CATARRHS.

In conclusion, I will quote from a very interesting paper, entitled "Diet and Exercise in the Treatment of Simple Chronic Inflammation," written by Dr. Mulhall of St. Louis, a prominent throat specialist (*Medical Record*, December 26, 1891): "It may be stated broadly, that the vast majority of simple, non-specific chronic inflammations in the human body are caused by the faulty habits of the individual. * * * Trace the life of an individual, from a hygienic standpoint, with constipation, hemorrhoids, leucorrhea, endometritis, intestinal or stomachic indigestion, hepatitis, bronchitis, laryngitis, pharyngitis, rhinitis, eczema, neurasthenia and a host of other disorders, and you will find in one or many ways that the laws of health have been long and grievously transgressed. The one has been overfed, underfed or badly fed; the other has neglected physical exercise. All other causes combined, including alcoholic excesses, are as nothing when compared with errors in diet and exercise in producing simple chronic inflammation. It is to these two causes, dyspepsia and perverted nutrition, physical inactivity and toneless muscles, nerves and glands, that I attribute the extraordinary prevalence of chronic nasal catarrh in the United States. Our climate, our macadam streets, our furnace-heated houses, are but subsidiary to these two great primal causes."

I trust that my plea has been made out, that there is room in the practice of medicine for the specialist in physique or scientific body-building. You may classify him as a kinesiologist, if you like, but I think he will be better content with the college title of physical director.

It is generally as useless to recommend "more exercise" without specific direction as it was to recommend "dieting," in an off-hand way, to the uninstructed sufferer.

Physique and physic are the happy combination which a natural therapeutics suggests in aiming at a constitutional cure that shall be radical enough to prevent relapse.

TRUE GASTRALGIA.

By George C. Clark, M.D.

READ BEFORE THE WASHINGTON MEDICAL AND SURGICAL SOCIETY, JANUARY 9, 1899.

TRUE gastralgia, also called gastrodynia and cardialgia, is not so frequent as it was formerly thought to be. It has been found by modern means of research to be due often to conditions not classed with the organic affections of the stomach, neither strictly with the purely functional gastralgias, such, for example, as hyperacidity, hypersecretion anacidity and other perversions of the normal gastric secretions.

These changes in the gastric secretions, while they are generally classed with the gastric neuroses, and probably in a measure correctly so, inasmuch as they are the result of nervous influences, at least in many cases, yet they are not representative of the true or genuine gastric neuroses as exemplified in the hysterical and neurasthenic gastrodynia. These perversions of the normal secretions produce their resultant gastric pains by their irritating properties upon the terminal filaments of the sensory nerves of the stomach, while genuine gastralgia, as are all the other genuine gastric neuroses, viz., nervous vomiting and eructation, termina ventriculis nervosa or peristaltic unrest, rumination, etc., is the result of the nervous temperament.

Ewald, in his "Diseases of the Stomach," says: "The class of genuine gastralgias is restricted to a very small group. My own experience leads me to be very sparing of the diagnosis of idiopathic gastralgia, and I believe that many of the cases grouped under this heading would be differently classed if they were

examined according to our modern methods."

Although the causes of pain in the stomach are indeed many and varied, the manifestations of true gastralgia are quite uniform, for the pain is always due to an irritability or hyperesthetic condition of the sensory fibers of the vagus, either in its peripheral terminal filaments or nucleus or in the reflections to it from higher centers, brain and spinal cord or other organs, namely, the uterus, ovaries, kidneys, liver, etc. Hence, true gastralgia may be due to local irritability or to irritation of the nerves outside the stomach (the stomach pains of locomotor ataxia are a good example of a reflected gastralgia).

The pains of true gastralgia are boring or cutting in character, not usually influenced by the taking of food into the stomach, or, if so influenced, rather benefited than the reverse; that is, taking food will generally, probably always, in a true neuralgia of the stomach, bring relief of the pains if taken during the paroxysm, and pressure on the epigastrium commonly brings relief, and the digestive function is "undisturbed" during the intervals between the attacks. This is probably the best diagnostic point between idiopathic neuralgia of the stomach and the pains due to organic changes. In the severest cases the pains are so severe as to produce profound prostration; the pulse is small, rapid and weak, and the skin covered with a cold perspiration. The disturbance of the heart and circulation, which occur in almost all cases, are no doubt due to the intimate nervous communication between these two organs, the heart and stomach. The attacks may be regularly intermittent, coming on about the same time each day, and the paroxysms are especially prone to recur at night. On account of this periodicity it was formerly thought, and is still claimed by some, that the malarial miasm is at the bottom of these cases, but I believe that many of the best modern authorities doubt the correctness of this assertion.

In its general features and duration the gastralgic attack is very variable. It may be short and mild or severe and last for hours until relieved. The attack com-

monly terminates by vomiting or the eructation of gas. But these are cases in which probably there is some abnormality in the gastric secretion, either in quantity or quality or both, and hence hardly to be classed with the true gastric neuroses, and the patient passes a large amount of urine of low specific gravity. These conditions occur more frequently in women before or during the climacteric period and while the generative functions are yet active. Of course, its greater prevalence in the female, occurring at this time of life, is on account of her greater predisposition to the functional neuroses in general. Other predisposing causes are anemia and a general debilitated state of the system from any cause, and hence frequently co-exists with neuralgias in other parts of the body. Predisposing factors are also easily recognized in severe mental strain and overwork, as seen in business and professional people and in women with an excess of social duties and pleasures, and in both sexes sexual excesses.

My chief object in trying to make this distinction between the purely neurotic gastralgias and those due to organic changes and altered secretions so emphatic is to mention the one medicine which, if properly administered, is the most useful in these neurotic cases and of little or no use in the others, and that is minute doses of Fowler's solution of arsenic. I shall not go into the hygienic treatment nor the aid which may be derived from stomach douching, the rest cure, etc., but simply to mention the medical treatment best in my estimation. Of course, it is well known that large doses of arsenic will produce irritation of the gastric mucosa, and hence the dose must be small: drop doses of Fowler's solution, preferably before meals. It can be given in just plain water, the bitter tonics, combined with laudanum or deodorized tincture of opium in water or in any compatible vehicle or combination that occasion may seem to indicate as most suitable. Bartholow extols the remedy given in this way in irritative dyspepsia, chronic gastric catarrh, even in chronic ulcer and cancer of the stomach, as well as in gastralgia. But having tried it in some of

these cases many times and in the others a few times, with indifferent success, I had about abandoned its use in stomach diseases, when perchance several of these purely neurotic cases fell into my hands in rapid sequence.

When finally, and as a last resort almost, the small doses of Fowler's solution recommended by Bartholow in this trouble, as well as the ones named above, came to my mind again the result was most marvelous. The improvement seemed to set in at once, and the return of the stomach to its normal state was most rapid. Now, as remarked earlier in this paper, neurotic gastralgia being usually associated with an anemic and generally run-down state of the system, and arsenic being undeniably a decided promoter of constructive metamorphosis, being one of the most valuable agents we possess in the treatment of anemia, chlorosis, etc., there is nothing more reasonable than that it should greatly benefit these cases after the lapse of a little time. But the marvelous rapidity with which it relieves some of the cases, sometimes a few minutes after its administration, would seem to indicate local anesthetic power upon the end organs of the gastric sensory nerves. At any rate, I am not able to explain its action in any other way. The other preparations of arsenic might have the same powers as the Fowler's solution, but my experience in this trouble has been limited to this preparation alone, and so long as I meet with the same good results from its use I shall not be tempted to try another.

LEUCORRHEA.—This is such a common affection among all women at some time in their lives that some dismiss it with hardly a thought. It is a condition which demands prompt treatment, and it is a trouble which should never be allowed to run on. Dr. John G. Reed, in the Cincinnati Lancet-Clinic, in going over his cases of leucorrhea says that women should be educated to understand that the "whites" is not a trivial condition, but that it may be very serious, and it is our duty always to examine every woman who comes to us with a history of the "whites."

NOTES ON RECENT SCIENTIFIC LITERATURE.

By William Lee Howard, M.D.,
Baltimore.

III.

THE Faculty library is greatly indebted to Dr. Osler for many interesting and valuable works in medical history and biography. Most of these works were selected by Dr. Osler while in England last year, and the carefulness displayed in selection is marked by the absence of the biographical hiatus which formerly existed in the Faculty library. It is my object this week to call attention to an excellent copy of the works of François Rabelais, physician, illustrated by Gustave Doré. Many there are, undoubtedly, who have an early recollection of reading of the magnificent talents of reason and imagination of this monastic scholar and medical philosopher, but that he was fully appreciated as a thorough anatomist and physiologist, as those departments of medicine were understood in the sixteenth century, is not beyond cavil.

It is as an example of medical knowledge of his time that his works have an especial value to the physician of today, however interesting his personal life and literary methods are to the scholar. Considering this life as a whole, it appears that of a laborious as well as daring genius, and one of independent as well as able. Man of free studies and free pleasures, Rabelais was above all others an enemy of whatever constrained him. Action was life to him. On coming into the world he found about him all sorts of fetters—first, those of the monastery and convent, then those of the Sorbonne, and, later, those of Parliament; finally, those of fanatics, both Papists and Huguenots. Rabelais never posed as apostle or martyr, but far more as a shrewd and witty *dilettante*, whose device, framed by himself, was *primo vivere, deinde philosophari*. His irony was trenchant, his sarcasm terrible and avenging, and the chains of superstition and sycophancy which bound society, and was ever clanging against the sore sides of science, caused him to build the imaginary abbey of Theleme, that is,

Free Will. On the front he inscribed, "Do what thou wilt," thus answering the old cry of the Dominican Izan at the stake of the Albegeois, "Believe as you do, and you shall be burned." Rabelais is a powerful emancipator of modern thought and the natural ancestor of the Voltaires and the Diderots.

A book which in reading gives us instruction and produces laughter is a valuable one. It matters little to the tired brain the motive of the laughter—even if the smile is caused by receiving such anatomical knowledge as the following: "In which mode of laughing they continued so long that their eyes did water by the vehement concussion of the substance of the brain, by which their lachrymal humidities, being pressed out, glided through the optic nerves."

Rabelais was a thorough student of Galen; in fact, Galen's anatomical knowledge and speculations penetrate every book and chapter, even to some of the incorrect Latin. When Rabelais draws not upon the anatomical information of the old anatomist he paraphrases Eusebius or directly quotes Hippocrates. Rabelais' classical knowledge was stupendous, and it is this knowledge of ancient and mediæval medicine which makes his works so valuable to us today.

That the apothecaries were as pliable in the sixteenth century as they are today is seen by the following: "And, instead of simpling, they visited the shops of the druggists, herbalists and apothecaries and diligently considered the fruits, roots, leaves, gums, seeds, the grease and ointments of some foreign parts, as also how they did adulterate them (i. e., all the said drugs)."

How he juggled with anatomical facts and wrought fancy with ribaldry is to be seen in his account of the monk clearing out the close of the monastery: "To some others he spoiled the frame of their kidneys, marred their backs, broke their thigh bones, pushed in their noses, poached out their eyes, cleft their mandibles, tore their jaws, dashed their teeth into their throats, shook asunder their omoplates or shoulder blades, speclated their shins, * * * heaved off the hinges their ishies, their sciatic or hip gout. * *

If any thought by his flight to escape, he made his head to fly into pieces by the lambdoidal commissure. * * * To some, with a smart souse on the epigaster, he would make their midriffs wag, then, redoubling the blow, gave them such a home push on the navel that he made their puddings gush out."

There was just as much credulity and joy in being humbugged in those days as in these of modern Christian Science delusion: "There are others in the world, these are no flim-flam stories, who, being much troubled with the toothache after they had spent their goods on physicians without receiving at all any ease of their pain, have found no more ready remedy than to put the said chronicles betwixt two pieces of linen cloth, made very hot, and so apply them to the place that smarteth, synapising them with a little powder of projection, otherwise called *doribus*."

The descriptions of venereal diseases and the treatment then in vogue are vivid and historically interesting. Rabelais frequently speaks of the "tub" and its uses, which reminds us of Shakespeare's reference to this treatment and the resemblance it bears to Rabelais' statements. Shakespeare undoubtedly refers to the treatment of syphilis when he mentions the "tub," as Rabelais implicitly does in his many statements concerning venereal diseases. Shakespeare also refers to the French disease being cured by the "tub." "The powdering tub of infamy" (Henry V, ii, 1); "The tub-fast and the diet," "Season the slaves for tubs and baths" (Timon of Athens, iv, 3); "She has eaten up all her beef, and she is herself in the tub," "Ever your fresh whore and your powdered bawd" (Measure for Measure, iii, 2).

HYDROCYANIC ACID AS AN ANTIDOTE TO CHLOROFORM.—In a recent number of the *Lancet* Dr. Frederick Hobday records his use of hydrocyanic acid in apparent death from chloroform administration. His method is to drop full medicinal doses of the acid on the back of the tongue, and when consciousness begins to appear he then uses the inhalation of strong ammonia vapor.

Correspondence.**"THE PASSING OF ALCOHOL."***Editor Maryland Medical Journal:*

DEAR SIR—In a recent number of one of our prominent medical journals there is an article with the above apparently simple caption. Upon perusal one discovers that the head line is not to be understood in the physiological sense at all. The author is not alluding, as might be supposed, to the prosaic work of the kidneys, but, like Mr. Wegg, has dropped into poetry and speaks in the language of the Arthurian legends. He quotes "one of the most honored physicians of our times" as saying "step by step the progress of science has nullified every theory on which the physician administers alcohol. Every position taken has been disproved."

The author of the paper in question does not think it at all necessary to discuss the physiological action of the drug, but brings forth in a "Pferdeparade" manner the facts that railroads require total abstinence in their employes, that a majority of Christian societies have banished wine from the communion service, since it arouses the appetite for intoxicants, and that wine is rarely used in public ceremonies or social gatherings. Not content with this he explains, satisfactorily to himself apparently, the accurate aim of our gunners in the late war upon the ground that they had no grog. Of course, the years of previous target practice, which naval authorities thought had something to do with the success of our gunners, is not taken into account.

The author even goes back to the anti-penultimate unpleasantness, and says that from his personal observation one of the most important battles of this war was lost because the commanding general was under the influence of intoxicants.

It will be remembered that when a similar accusation was brought against General Grant, Mr. Lincoln said, "Tell me what brand of whiskey he drinks, and I will send a barrel of it to each general in the army."

In the peroration of the article alluded to the question is asked, "Ought we not

* * * to rejoice in the better light that has dawned upon us, as did St. Paul?" The writer should know his Paul better, for did not the Apostle to the Gentiles advise Timothy to take a little wine for his stomach's sake? This advice was given in the apostle's regenerate days, too, after the "light had dawned."

Surely we have had more than enough of this unscientific, namby-pamby, penny-dreadful style of argument. The constant iteration of the use and abuse argument has become as "tedious as a tired horse." That the use of alcohol by healthy persons is unnecessary, and that the overindulgence in it is a serious vice, nobody will deny, but, by the same token of good sense, no physician who is familiar with the physiological action of the drug, and who has prescribed it in the proper manner, can deny that it is one of the most valuable agents at our command.

GEORGE J. PRESTON, M.D.

Society Reports.**THE CLINICAL SOCIETY OF MARYLAND.**

MEETING HELD JANUARY 6, 1899.

THE meeting was called to order by the president, Dr. J. W. Lord.

Dr. Christian Deetjen was elected to membership.

Dr. J. W. Chambers exhibited a case of "Gunshot Wound of Abdomen—Exhibition of Patient."

The case I shall exhibit is one of gunshot wound in a boy fifteen years of age that occurred November 14. It was an accident through one of his playfellows, and the bullet entered here, just about an inch internal to the anterior superior spinous process. He was brought into the hospital a half-hour after the accident considerably shocked and much frightened, with a rapid pulse and temperature of 97°. He was given one-quarter grain of morphia and one-thirtieth grain of strychnia and was rapidly prepared for operation. In the course of an hour the abdomen was opened in the median line, and we found this number of wounds: Small intestines, four perforations; peritoneal perforation, the muscular and part of the mucous coat I mean, two; mesen-

tery, two; cecum, two; the appendix shot in two; ascending colon, one, and partial perforation, one; the rectum, one, and mesocolon, one. Altogether sixteen perforations from this one bullet. The intestines were brought out from the abdomen, protected with warm towels, and carefully examined. The abdominal cavity was washed out with warm, normal salt solution and the wounds sewed up. All the ordinary methods for closing wounds were used—the Halsted quilted stitch, the Cushing stitch, the Lembert stitch, and, in fact, about all the stitches ever used for this purpose. The time of operation was about one hour and seven minutes. The abdominal wound was closed by sutures and this one point left for drainage.

There are two peculiarities about this case. In the first place, he came into the hospital with a portion of the omentum hanging out of the wound about three inches. I had never seen that before in gunshot wound, though it is not uncommon after stab wounds. I have not found the bullet, for I tried to take care of the boy and let the bullet take care of itself. I do not know where it is and do not care especially. A second peculiarity was the wound of the appendix. The boy made a good recovery. He was at no time very ill. There was some suppuration along the line of the bullet that proved to be due to a pure culture of the colon bacillus.

Dr. Randolph Winslow: I hardly think this case is entitled to be regarded as one of sixteen perforations. It seems to me it is one of about six perforations. There is a great deal of difference between complete perforation of the bowel and injuries that are not complete, but only wounds of the wall of the intestine. Especially is this true with regard to wounds of the mesocolon.

Dr. Chambers: I should have said sixteen wounds of the intestines, not sixteen perforations, for four of the wounds were only partial and three were wounds of the mesentery.

Dr. Winslow: I do not mean to detract from the result, for if the number be reduced to nine perforations I think it is still the largest number of perforations that have been sutured and cured in the

city. I know that in my own work, which has been fairly extensive, I have never sutured that number of perforations. I think I have had as many as seven. There is not much to be said in regard to the case, except words of congratulation concerning the result.

The time is past, I take it now, where the matter is a subject for discussion as to whether an operation of this character is proper or not, although I have recently seen in some of the journals, speaking of the late Spanish war, that the latter has left the matter of operating in intestinal perforations unsettled. It seems that some individuals that were shot apparently through the intestines recovered without operation. None recovered after laparotomy.

Dr. Chambers: I think there was one recovery on one of the boats.

Dr. Winslow: I do not think so. But I do not think it modifies or overrules the practice, which has been greatly extended, of opening a person's abdomen for a perforating wound. There is apparently little or no danger in an operation of this character so far as the operation is concerned, for the patient is about as likely to get well after laparotomy as after such an injury without operation. I do not think the operation modifies the gravity of the prognosis, while, if we do find a vessel cut or a perforation, the patient would assuredly have died—in Baltimore at least—if not operated upon. It comes now in the same category with the opening of the abdomen for typhoid perforations. The patient is going to die if not operated upon. I do not think any of us are forced into a position of defending ourselves, for the burden is upon the other side, and if a patient dies without operation the physician in charge of the case is, in my opinion, derelict. Notwithstanding the results in the Spanish war, I think the principle is well established.

The results gathered from all over the country have been extremely good. I have had nine cases, with five recoveries. I operated once for perforation of the large curvature of the stomach, and had to open the layers of the omentum to get food, etc., from between them. The pa-

tient died apparently from shock, and why I do not know. It was not the result of hemorrhage, and at autopsy there was no peritonitis.

In one of my cases, a man who was shot in the side, the bullet passed transversely. I sutured up a lot of holes, and though I had them all, but at the autopsy there was a hole found in the rectum.

In most cases it is proper to make the incision in the median line, but in one of my cases where the bullet passed through the bone ilium, as well as the intestine ileum, I made the opening in the side.

Dr. Blake: I regret that I was not present in time to hear the remarks of Dr. Chambers, but some of the remarks of Dr. Winslow suggest the point that I want to emphasize—that is, the importance of making a post-mortem after these fatal cases. Dr. Winslow said he did not know why his patient was secondarily shocked. It recalls a case I had three or four months ago of a man who was shot, and, believing as Drs. Winslow and Chambers do, that it was good surgery to look for a bullet supposed to have entered the abdominal cavity, I operated. He was shot in the left iliac region, and it was thought he was lying down when shot. I opened the abdomen, and found just within the pelvis the wound of entrance or exit of the bullet, but failed to find the bullet in any of the viscera, and failed to find any injury anywhere. My patient did not seem to be at all shocked from the operation, but the next morning he developed a very high temperature and seemed to be suffering from an acute infection. Having used the ordinary precautions, I was at somewhat of a loss to account for the temperature. Within the remarkably short time of twenty-four hours he died. A post-mortem was held, because it was a medico-legal case, and the whole contents of the abdominal cavity were examined. We could find nothing to explain the sudden death until just before we were about to give up the examination we came to the floor of the pelvis, and while there was no opening, we found something hard in the bladder, which proved to be the bullet. We succeeded in tracing the circuitous route of the bullet through the iliacus

internus muscle into the bladder, which was allowed to leak just a little. But for the post-mortem I should have said in my death certificate acute sepsis, and would not have known what killed the man.

We occasionally have a man shot through the abdomen who gets well without operation, but we cannot tell where the bullet went or whether there were internal injuries in that case. As a rule, the probe reveals simply nothing, for the contractions of the various layers of muscles prevent the probe from following the tract.

Dr. Chambers was very fortunate to bring his case through successfully, considering the enormous amount of work he had to do with the intestines.

The question as to whether we should operate is one of judgment. In some cases there are special indications for an operation, but there are many that give no indications as to what should be done, and those are the ones that puzzle us and cause us to hesitate. As a rule, I think we should try to follow the bullet.

Dr. Chambers: I did not mean to discuss the question of gunshot wounds in general, and in exhibiting this case I called attention to the number of wounds simply because of the time necessary for operation and the necessity of cleansing. The boy was severely shocked.

I want to call attention to the relation between the amount of shock and the amount of damage. We sometimes have a patient come in with no evidence of shock, and yet there is serious injury. I remember one man who had scarcely any pulse at all and who came in with the remark that he was going to die from the wound over his heart. I found it to be a moral shock, assured him on examination that he was not going to die, and in about ten minutes he was walking about. So I have taken to trying to reassure these patients, even against my knowledge perhaps, so as to overcome this moral shock.

No one can tell anything about where a bullet has gone. You can tell perhaps where it entered and where it made its exit, but you cannot tell where it has been in the meantime. I believe wounds near

the pelvis are more severe than those higher up, and I am inclined to think the pulling and dragging around of the plexus in the higher portion has much to do with the shock and death. I had one case in which the duodenum was shot in two and the patient recovered, but was the most intensely shocked man I ever saw.

Dr. Winslow: What Dr. Chambers has said in regard to the dragging is perfectly right. In my case of injury to the greater curvature of the stomach it was exceedingly difficult to reach, and I had to drag the stomach as though I were pulling on a rope. The man did very well and got off the table in good condition, but my assistant, Dr. Riley, noticed the peculiar shock very soon afterwards.

Dr. Edward M. Schaeffer read a paper entitled "When to Prescribe Physique" (see page 61).

Dr. Herman: There is, perhaps, nothing to add to such an exhaustive paper as the one we have listened to, but I imagine the author has not laid enough stress upon the distinction between physic and physique. It might be emphasized a little more that while physic is indicated in acute troubles, physique is always indicated in chronic troubles, and if it were the rule for all doctors to prescribe physique when they have these chronic cases they would probably be more successful in real therapeutic work. I think it is the province of the physician to study all the branches that go to make up medicine, for if we turn over all our cases to specialists we shall have nothing left to ourselves. To be sure, the study of exercise is a science, and it takes time to learn it, but that is no reason why it should not be taught in a medical college. There are many things taught in the medical colleges that might be dispensed with; for instance, there is a lot of time taken up with the well-recognized specialties, like diseases of the eye and other special organs, that might be omitted, or, at least, passed over in a shorter time. The schedules of medical colleges should be rearranged, and such studies as physical exercise, hypnotism, etc., should be added. These are not specialties at all, and I only consider as justifiable specialties those that deal with special organs.

Dr. Blake: If I have learned anything from this paper then the last speaker was laboring under some mistake. Of course, it goes without saying that if he turns all his cases over to specialists he will have nothing left. What I thought I learned was simply this, that the physician having under his control the welfare of the entire community, it is for him to teach this important fact, that physical training of the children should begin in the home and not in the medical college. No school is now considered thorough, I believe, unless it has a football team that furnishes ample supply of material for the surgeon in charge, but if there is to be any benefit derived from the teaching of Dr. Schaeffer's paper it should be inculcated in the home instead of the higher schools, where, however, it should be continued. If you train the child it learns the way it should go, and in later life will train itself.

Dr. Wm. Lee Howard: I am thoroughly in sympathy with the spirit of this paper, but made the mistake when a student at Yale College of overdoing my athletic training. I became an all-around athlete, but at the expense of my nervous system for many years afterwards. Physical exercise should be under wise supervision by a competent medical man. When I hear of parties exercising with 20-pound dumb-bells I am inclined to "write them down an ass." There is a distinction between physical and physiological exercise. The latter trains the vital organs and adds to the living capacity. Children should receive such training in every family.

Dr. Schaeffer: I would just like to add that from what I have been told of the leading institutions for women where training is given, the doctors are much more apt to write excuses for their relief from exercise than to insist upon their taking it. I have wondered if we could not get the doctors to indorse the use of physical training in schools.

I am surprised that the male sex here in Baltimore has not taken up such physical training as they have in other cities. The girls' schools have led the way, but the boys are not examined to discover their physical deficiencies.

MEDICAL SOCIETY OF THE WOMAN'S MEDICAL COLLEGE.

MEETING HELD TUESDAY, JANUARY 24, 1899.

THE meeting was called to order by Dr. B. B. Browne.

Report of "Case of Diphtheria" by Dr. May F. Jones, read by Dr. Lewis.

Demonstration of the lepra bacillus by Dr. Lewis.

Following report of "Case of Fibro-Myxo-Sarcoma" by Miss E. St. Clair, one of the third-year students of the college:

Carrie B., aged two years and six months; white. Entered the Good Samaritan Hospital January 14 for operation. She is of healthy parentage, and has three sisters and two brothers, all well. No malignant disease in any branch of the family except in one maiden great-aunt, said to have died of epithelioma at ninety. At birth the patient was fat and well developed. Has had no sickness of note except an attack of enteritis, which was treated by the mother.

I saw the case for the first time on Christmas afternoon, when it was quite ill, though not especially emaciated. The abdomen appeared distended, most marked in the hypogastric region. It was firm, and pressure upon the inguinal region caused pain. Upon inspection of the external genitals, a small, pale, somewhat roughened mass, about the size of a shell-bark, was seen to project between the vulvae. Pressure upon the mass caused some pain, but no hemorrhage. The child appeared restless and constantly complained of a sensation as though pins were sticking her.

On January 13 the mass had considerably increased in size, and now protruded fully an inch and one-half beyond the vulva. The child was now much emaciated, was pale, face had an anxious, pinched expression, and was constantly moaning with pain.

The abdomen had become greatly distended, and but little urine was being passed. Recognizing the gravity of the case, I brought the child to the city and

placed it in the Good Samaritan Hospital, under the care of Dr. Browne.

Under chloroform anesthesia Dr. Browne catheterized the child, removing about three pints of apparently normal urine, with the resulting disappearance of the abdominal distention.

The growth was attached by a broad base to the anterior wall of the vagina. By means of the scissors and sharp curette the external more or less soft mass was removed, and the vagina and uterus found distended, with small grape-like masses resembling somewhat the echinococcus cysts. These masses were removed partly with the curette and partly by spontaneous expulsion, the abdominal muscles contracting and expelling the masses much as the placenta is expelled after the birth of the child.

There was but little hemorrhage, and after packing with iodoform gauze the child was put to bed in a very fair condition. The child is now brighter and much improved.

Dr. Browne then read the following report of the microscopical examination of frozen secretions by Cullen's rapid method: The papillomata, which had their attachment at the vaginal fornix, was found to consist, 1st, of striated muscle-fibers of varying degrees of development; 2d, of mucoid tissue, with its characteristic branching cells; 3d, of circumscribed masses of embryonic connective-tissue cells. The surface of the tumor was covered by squamous epithelium. Eosinophiles and basophiles were scattered through the specimen. The entire structure was loose-meshed, and the interstices were in places filled with a gelatinous substance. The diagnosis of this tumor is thus: Rhabdomy-myxo-sarcoma.

The papillomatous mass which projected from the vaginal outlet consisted of accumulations of embryonic connective-tissue cells alternating with areas of mucoid and adult fibrous connective tissue. Small foci of beginning ulceration were seen upon the exposed surface. The diagnosis of this tumor is fibro-myxo-sarcoma.

Medical Progress.

THE PREVENTION OF GONORRHEA.—In the *Georgia Journal of Medicine and Surgery* there is quoted from the *American Journal of Dermatology and Genito-Urinary Diseases* an article by Dr. G. J. Monroe on the prevention of gonorrhea in the male, in which he gives a patient, whom he characterizes as a "high roller," a prescription to be used after every connection to prevent gonorrhea. Immediately after intercourse he orders the patient to urinate and then wash the penis and scrotum with tar soap, which he is to carry with him. Then he is to inject with a glass syringe a solution of the permanganate of potash, one drachm to seven of water. This is to be passed out at once, and a second injection is held in the urethra for about a minute; then the penis and scrotum are to be washed with this solution, which is not wiped off, but allowed to dry on the skin.

By following this direction the patient has never had a second attack of gonorrhea but once, when he broke his bottle of valuable solution. He has had intercourse for the sake of science with women who are known to have gonorrhea, and has escaped by the careful use of the treatment suggested. There may come a time when the man-about-town will carry his soap, bottle, syringe and cotton with him always, and the genito-urinary surgeon will have no more cases of gonorrhea to treat.

* * *

DIETETIC CAUSES OF INEBRIETY.—In an article on that subject in the *Journal* Dr. T. D. Crothers says:

1. Inebriety is a most complex neurosis. The causes are equally complex, and include all the various states of degeneration which influence and disturb nutrition.

2. Obscure indigestion begins, and for this drugs and bitters containing alcohol are used. The narcotism which follows is so grateful that it is continued.

3. Dietetic delusions are fostered in the minds of parents and children, and from this many different forms of inebriety begin.

4. Often the most maniacal and chron-

ic inebriates are from these delusional dyspeptics.

5. Starvation is present in many of these cases. The quality and variety of foods are deficient, and defective nourishment follows.

6. The uniformity of taking foods and the quality and variety are essential. This and nutritional rest and mental anxiety are important factors.

7. The inebriety following these conditions is successfully treated by elimination of the toxins and special correction of the nutrition.

8. Nutrition is a very active cause in the production of inebriety, and should receive a careful study in all cases.

* * *

MARMOREK'S SERUM.—Dr. Wm. L. Baum, in *Medicine*, has given a thorough study of the therapeutic value of Marmorek's serum in streptococcic infection, and his conclusions are given as follows:

1. In pure streptococcic infections the serum undoubtedly exercises a favorable influence on the course of the disease.

2. In mixed infections the influence of the serum was demonstrable, but it merits further trial as an adjunct to other treatment.

3. Considering the grave character of complications of non-streptococcic nature reported, ordinary rules of therapeutics would demand that in such cases, as with the diphtheria antitoxine, all indicated therapeutic procedures must be employed as well as the serum.

4. In view of the fact that erysipelas streptococci and phagocytes often exist side by side in the lymph channels, it is fair to assume that the influence of the serum is directly exerted bactericidally on the streptococci and not entirely through stimulation of phagocytic action.

5. The initial dose in all cases should be twenty cubic centimeters, to be followed by ten or fifteen cubic centimeters, according to the indications, each twenty-four hours.

* * *

LARYNGITIS.—The treatment of speakers' and singers' laryngitis is not always an easy matter, because the cure must be complete and carried out at once, as to this class the voice is the stock in trade. Many a public speaker, singer or actor

may lose an engagement or a large sum of money just because a hoarseness persists and renders the voice useless. It is just here that the throat specialist's skill comes in. Most persons would use the ordinary cleansing sprays, the direct application of a strong zinc solution or a tannin-glycerine solution.

Dr. Holbrook Curtis, who has a reputation among professional persons, has an article in the *Lancet* in which he says he has long ceased to use strong astringent applications to the vocal cords of singers, but he uses an extract of the suprarenal capsule, which, applied to the mucous membrane of the larynx, is very soothing in effect. He also finds it useful when applied to the mucous membrane of the nose. Dr. Dundas Grant of London, who discussed this paper, said he had had the same effect from the extract of suprarenal capsule.

* * *

DROPSY AND LIFE INSURANCE.—Dr. John S. Fulton asks the question in the *Medical Examiner* if the fact that an applicant for life insurance has had dropsy should necessarily debar him from life insurance, and answers it as follows:

"The fact that an applicant has had dropsy necessitates a retrospective diagnosis, which, though difficult, may yet be made with reasonable probability if the characteristic features and clinical course of the various dropsical diseases are kept clearly in mind. To the question of life insurance in such cases but one general principle seems to apply—if the dropsy was due to any of those diseased conditions which are accompanied by permanent structural changes, grave functional impairment, tendency to recurrence, or the establishment of diathesis, insurance cannot be written. On the other hand, if the dropsy was due to conditions involving no lasting structural alterations, progressing to absolute repair, without tendency to recurrence, grave sequelae or cachexia, then insurability is recovered as soon as the lapse of time has set a sufficient check against our findings."

* * *

OPIUM POISONING.—The treatment of opium poisoning must be prompt and long-continued. Dr. H. W. Strader re-

ports in the *Journal of the Alumni Association of the College of Physicians and Surgeons of Baltimore* a case and gives the results of his observation as follows:

1. That it is almost impossible to make a mistake in diagnosis.
2. That as death results by a paralysis of respiration, we have in atropia a remedy of much value.
3. That strychnine in large doses increases the action of atropia.
4. That the stomach should be vacuated promptly in all cases. Apomorphia should not be used, owing to its well-known depressing effects.
5. That potassium permanganate decomposes morphine, and should be given in solution hypodermically.
6. That flagellation, irritants and rough treatment are absolutely useless.

* * *

NAUSEATING COUGH REMEDIES.—There has long set in a reaction against nauseating remedies, and this accounts in part for the large number of tablets in use. Dr. Robert Reyburn, in the *Charlotte Medical Journal*, thinks it is a shame to give nauseants and emetics by the stomach when medicines in sprays might be used. In children full single doses of these medicines will cause emesis and bring up the mucus, and the nausea will at once cease. Muriate of ammonia may be used in a spray and not swallowed. The coal-tar products should be used with great caution in children, as they may cause death by their depressing effects. Finally, all medicines, where possible, should be given by inhalation and by the bronchial mucous membrane rather than by the stomach.

* * *

A RESTRAINING INFLUENCE.—There is a case recorded in the *American Medical Compend* and copied in the *Medical Record* of a physician who had often tried to keep one of his gadding female patients at home, but always without success, until he came upon the plan of giving her a pill containing a small quantity of tellurium, which so affected her breath that she was unable to appear in public for a month. The poor patient never guessed the cause of her trouble.

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The increase in the number of so-called Christian Scientists demands the calm attention of physicians and those to whom the health of the community is committed. In Baltimore the last few months there has been a steady influx of these alleged scientists. This fact is accentuated by the professional advertising signs now to be seen in that portion of the city where the wealthy reside—a significant fact.

That the American public likes to be humbugged was an axiom firmly emblazoned upon the crest of the late P. T. Barnum, and if the full-grown simple desires to waste his money by handing it over to those financially cleverer than himself, we, as physicians, should only study with profit the morbid mobility of these menial minds. When, however, these Christian Scientists—a name that is an insult to the Nazarene—menace the health of our community, cause the death of the helpless, young and innocent; allow, with ignorance, stupidity and impunity, infectious and contagious diseases to scatter and rampage with all the license of the early thirteenth century, it is time for us, as physicians, to take cognizance of this sect, whose victims are insulated in the dark umbrage of ignorance and delusion.

The Christian Scientists recognize no infectious or contagious diseases; hence there is no isolation of the patient, no protection of the community. They take fees for attending obstetrical cases, but do not admit any such conditions as exist in ophthalmia neonatorum. They walk broadcast, superciliously flaunting our health laws and hygienic regulations into the faces of the assumed intelligent masses and shout their unintelligent jargon and blasphemous voicings from the portals of their money-making mosques.

What is the attitude of our authorities in the matter? Man has ever been chivalrous to woman, but in this case we must—it is our bounden duty—to protect the young and ignorant, the helpless infant and the deluded mother. About 90 per cent. of these misnomered scientists are women and the other 10 per cent. of men—well, they are also women.

* * *

The last number of the *Public Health Reports* contains a very timely supplement on the diagnosis and treatment of smallpox, and this same weekly gives the number of cases of that disease reported by States. In Alabama there were over a hundred cases reported during January, with a few deaths; in Jones county, Georgia, there were 300 reported in the same time; in Nebraska almost 300, with stray cases in New York, New Jersey and Pennsylvania. In Virginia in this time there have been reported eleven cases from Alexandria, four from Newport News and ninety from Norfolk. A few cases have also been seen in Washington and Baltimore, and many cases have undoubtedly occurred which have not been reported.

In view of all these facts, it is the evident duty of physicians to force vaccination on their patients. In Baltimore the Health Commissioner has had vaccinated by force a large number of negroes, among whom a case of smallpox was found, and the vaccine physicians are now making genuine visits of inspection.

Vaccination is simple and easy, and, as a rule, causes no pain or even inconvenience. The disease of smallpox may end fatally or it may cause horrible disfigurements. The story of Dr. Herne and the conscientious objectors so well narrated by Rider Haggard should be read by all physicians. The public needs protection and the health officers will see that they have it.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending January 28, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	..	..
La Grippe.....	..	20
Pneumonia.....	..	39
Phthisis Pulmonalis.....	1	18
Measles.....	23	..
Whooping Cough.....	2	1
Pseudo-Membranous Croup and Diphtheria. }	33	7
Mumps.....	..	..
Scarlet Fever.....	13	..
Varioloid.....	..	..
Varicella.....	4	..
Typhoid Fever.....	2	3

Germany is establishing lung sanatoria all over the empire.

Sir Henry Thompson of London has been promoted to a baronetcy.

The New York Cancer Hospital is now known as the General Memorial Hospital.

Dr. L. S. Foster of Mathews county, Virginia, has been elected superintendent of the Eastern State Hospital at Williamsburg.

Physicians at Yukon have organized a Yukon College of Physicians and Surgeons to examine all physicians coming to that place.

Dr. Paul Paquin is reported to have resigned his position as secretary of the Missouri State Board of Health to take charge of a hospital in North Carolina.

The *Medical Record* says that a London medical society reserves a certain number of meetings each year for the reporting of errors and mistakes in practice.

Gen. Leonard Wood of Washington is receiving well-earned praise for his model government of Santiago and for the thorough manner in which he has looked after the health of that part of Cuba.

There is said to be great need of a physician at Haguc, Westmoreland county, Virginia, where there are forty families and no physician within a radius of twenty miles. It is accessible to Baltimore and Washington.

The following have been elected to chairs in the Kentucky University: Dr. J. B. Marvin, practice of medicine; Dr. J. M. Holloway, surgery; Dr. C. W. Kelly, anatomy; Dr. S. E. Wood, chemistry and children.

Among the recent deaths reported in the profession are Dr. F. M. Lancaster of Charles county, Maryland, who died this past week, aged 76, and Dr. Thomas Gibson of Virginia, who also died suddenly this week.

During the past year there have been treated at the Baltimore Eye, Ear and Throat Charity Hospital 3473 patients, and the dispensary attendance reached 11,219. As many as 460 surgical operations were performed upon the eye, ear, nose and throat.

The Instructive Visiting Nurse Association in its annual report shows what excellent work that important body has done among the poor of Baltimore. This association co-operates with the various charity organizations of the city.

The interesting sketch of Dr. John Archer, which was read in part by Dr. Henry M. Hurd at the annual meeting of the Book and Journal Club of the Faculty, was prepared by Dr. George W. Archer, a retired physician of Harford county. The portrait of Dr. John Archer was presented by Mr. George Archer of Baltimore.

The following officers were elected in the Atlanta Society of Medicine for the year 1899: President, Dr. W. S. Goldsmith; vice-president, Dr. Katherine Collins; secretary, Dr. Claude A. Smith; treasurer, Dr. E. Van Goidts-noven; librarian, Dr. Mike Hoke. The society has also instituted a movement for the thorough organization of a medical library.

During 1898 there were treated at the Hospital for Consumptives of Maryland, situated at Baltimore, thirty-six cases, of which nine were discharged much improved and had gone to work, seven were discharged improved but not able to work, three were found on further examination not to have consumption and were discharged, three were not improved at all, two died and twelve were in hospital at the end of the year. The hospital has at present fourteen beds, and takes only white men and women, both pay and free. It is situated now at the corner of Park avenue and Hoffman street, but will be removed to the country in the spring.

Washington Notes.

Two new cases of smallpox were reported to the Health Department Tuesday afternoon.

Assistant Surgeon G. M. Augeny has been transferred from the naval hospital at Chelsea to the "Indiana."

Surgeon J. B. Boss, formerly of this city, has been assigned to duty at one of the hospitals to be erected in Havana.

Past Assistant Surgeon L. L. Von Wedekind has been detached from the Naval Academy at Annapolis and is ordered to the Asiatic station.

Surgeon H. G. Beyer is ordered from the "Amphitrite" to the "Wabash," and Surgeon J. M. Edgar from the "Cincinnati" to the "Richmond."

Acting Assistant Surgeon Arlington Pond, U. S. A., will accompany the first transport sailing from New York for Manila, and Acting Assistant Surgeon C. H. Andrews, U. S. A., will accompany the first transport sailing from San Francisco for Manila.

Surgeon D. N. Bertolette is ordered from the "Vermont" to duty in this city as a member of the Medical Examining Board. Medical Inspector N. M. Ferebee reports for duty at the Naval Hospital, Norfolk. Inspectors Cooke and McMurtrie are retired.

At the society Wednesday evening Dr. A. F. A. King presented a paper entitled "The Mosquito and the Malarial Parasite." Dr. C. L. Allen presented cases and specimens (1) Edema in Hemiplegia, (2) Early Degeneration of the Pyramidal Tracts as Shown by Marchi Method.

The annual meeting of the Eastern Section of the American Laryngological, Rhineological and Otological Society was held in this city last week. The session was well attended by the specialists from the Eastern section of the United States. Dr. Charles W. Richardson, the president of the society, presided at the meeting.

Dr. T. Hayward Hayes, formerly of the United States Marine Hospital Service, and graduate of the Maryland University, who went as a medical missionary to Siam about fifteen years ago, is soon to return to Washington as a representative of the Siamese government. The Doctor now holds the rank of Major Surgeon in the Siamese Navy.

Book Reviews.

OCULAR THERAPEUTICS FOR PHYSICIANS AND STUDENTS. By F. W. Max Ohlemann. M.D. Translated and edited by Charles A. Oliver, A.M., M.D. 274 pages. Philadelphia: P. Blakiston's Sons & Co. 1899. Price \$1.75.

The object of this little volume is to furnish a ready reference to the various remedies suggested for the treatment of any given disease of the eye. It is handy, practical and fairly well up to date, but, unfortunately, is full of errors.

The editor's preface states that "as the original work has all of the drug values expressed in the metric system of weights and measures, these have been retained, the nearest equivalent in apothecaries' weights and measures being noted immediately after the metric dose of each ingredient." The scheme is an excellent one, but the translator seems to have had a very indefinite or imperfect idea as to relative values. Fully one-fourth of the prescriptions contain mistakes, some trifling, it is true, and perhaps none that would cause serious trouble, but still a large number that are inexcusable. For instance, on page 13, one-quarter of a liter is given as equivalent to eight fluid ounces, and only three lines below, on the same page, as equivalent to four fluid ounces. On page 16 the following appears: "Hydrarg. chlorid. corrosiv., 0.04 grammes equals six grains, when it should be six-tenths of a grain; 100 c.c. is a quantity ordered in many of the prescriptions, and in some it is given as equivalent to three ounces, one and one-half drachms in others, three ounces, one drachm, forty-three minims, and, in others, as three ounces, two drachms, 153 minims, etc., sometimes two different translations appearing on the same page, as occurs on page 114, where the two last-named quantities are given and where also 200 c.c. is quoted as equivalent to three ounces, three drachms, and so one might continue. It is difficult to understand how the editor, who is usually so very careful in his work, could have allowed the proof to pass him in such a condition.

Chapters V, IX and XI, dealing with General Treatment, Diseases of the Cornea and Diseases of the Iris, are worthy of especially favorable mention, and the book will undoubtedly prove of great service to the physician as well as to the student. It is only necessary to advise that the prescriptions be used either as they appear in the original metric quantities or that each reader shall make for himself a careful translation to grains, drachms, etc.

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Original Articles.

MALARIA.

By William Sydney Thayer, M.D.,

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MR. PRESIDENT, LADIES AND GENTLEMEN—To deal with a subject as large as malaria in an hour's talk is rather a difficult problem, and I trust that you will pardon me for the necessary incompleteness of my remarks. It has, however, seemed to me that it might be of interest to this association to hear a few words treating particularly of the nature of the disease and the relation of its manifestations to the parasites which have been shown to be the exciting cause. It may also interest you to learn a little concerning recent observations which have been made with regard to the manner in which the disease is acquired.

That fevers, commonly associated with chills which show a marked tendency toward periodicity, are common in warm, swampy and marshy regions has been known for centuries, and with the introduction of quinine* in the seventeenth century it was discovered that a large class of these fevers responded immediately to treatment by this drug. That the term "malaria" became applied to this affection is an interesting indication of the views held by old observers as to the manner of origin of the disease. The word "malaria" represents the two Italian words "mal' aria," signifying bad air.

*The crude cinchona bark was then used.

But while the term was at one time limited to fevers which yielded to treatment by quinine, it has since been applied in a general way to all sorts of febrile and non-febrile conditions, many of which have, in reality, nothing to do with the clearly-defined disease which we now know as malarial fever. To complain, as is so common, that we suffer from "malaria" when we are tired, or have headache, or are "run down" from overwork, is about as rational a proceeding as if we were to say that we had smallpox or diphtheria or measles. Malaria is, in fact, a disease as sharply defined and as easy of diagnosis as any of these affections.

For many centuries, indeed from a period before the Christian era, malaria has been supposed to be due to some animal or vegetable poison which entered the body with the drinking water or the respired air. But it was not until 1880 that the existence of a parasite causing the disease was definitely proven. Laveran, a French army surgeon, at that time stationed in Algiers, discovered that the blood of patients suffering with malaria contained living organisms which developed within and at the expense of the red corpuscles. He considered himself justified in assuming that these parasites were the cause of the disease, because they were invariably present in patients suffering from the affection and never found in other individuals, and, further, because they disappeared rapidly and synchronously with the subsidence of the symptoms of the disease under treatment by quinine. Five years after this Golgi, in Italy, followed later by a number of other observers, described the life history of these parasites within the cir-

culatation. Studies in Italy, America, Russia and Germany since then have shown that there are three distinct varieties of the malarial organisms—one in which the parasite passes through its complete cycle of development in about seventy-two hours, the quartan parasite; one in which the cycle of development lasts about forty-eight hours, the tertian parasite, and one in which the cycle of development is more or less irregular, being completed sometimes within twenty-four hours, in other instances extending over a period of forty-eight hours or even more. This parasite, which is associated with fevers which in temperate climates occur during the later summer and fall, has been called the estivo-autumnal organism. These several types of parasites have certain morphological differences which are easily recognizable by the skilled microscopist.

The tertian and quartan parasites in their youngest forms are represented by small, colorless, hyaline bodies, which lie within the red corpuscles. These bodies show active ameboid movements. As they increase in size they develop small, dark-brown pigment granules, which are often thrown into active motion by the undulations of the protoplasm of the parasite. The pigment is developed apparently from the disintegrated substance of the red-blood corpuscle. Eventually, at the end of seventy-two or forty-eight hours, according to the variety of the parasite, the red corpuscle is entirely filled by the organism, which is now ripe for sporulation. The pigment then gathers into a small clump or block at one point, usually in the middle of the parasite, which breaks up into from six to twenty or thirty small, clear, hyaline bodies. These are more numerous in the tertian than in the quartan organism. The red corpuscle having been entirely destroyed, the clear hyaline segments, which apparently represent young parasites, are set free in the circulation and are ready to attack other red-blood corpuscles. Golgi first pointed out the remarkable fact that in infections with the tertian or quartan parasite the organisms are present in great groups, almost all the members of which are at approxi-

mately the same stage of development. Thus in infections with one group of the tertian parasite sporulation of the entire generation occurs within a period of a few hours every other day; in infections with the quartan parasite within a few hours every fourth day. The estivo-autumnal parasite passes through a cycle of existence similar to that of these other organisms, with the exception of the important difference that the tendency toward arrangement in groups is much less definite, the parasites frequently being present in the blood in all stages of development.

Not all mature parasites, however, undergo sporulation. Some are observed to break up and become disintegrated, while others show an interesting change, which has given rise to much speculation and inquiry. From full-grown bodies there develop suddenly a number of actively-motile filaments, which thrash about among the surrounding blood corpuscles and not infrequently break loose from the mother cell, rushing through the field with lively serpentine movements. These filaments have been called flagella. What is their significance? Two main views have been held. On the one hand, they have been considered stages in a degenerative process; while, on the other hand, some observers have believed that they represent forms in the life history of the parasite destined to preserve its existence under conditions other than those with which it meets within the human body. This is a view which, from analogy with what we know of other parasites, is not unreasonable. It is well known that some parasites, after having passed through their ordinary intracorporeal cycle of existence, develop forms which, while within the host which they then occupy, are sterile, but which are capable when, owing to the death of the host or from any other reason they reach another medium, of undergoing further development, representing, then, the first stages of a second extracorporeal cycle of the organism. I mention these possibilities now, for I shall come back to the subject later on in connection with some recent studies.

* * *
Interesting as are these facts with re-

gard to the constant presence of the parasite in patients affected with malaria one might naturally ask further:

(1) Where and how do these parasites exist outside of the human body?

(2) How do they obtain entrance into the body—in other words, how do we become infected with malaria?

In answer to the first question we can only say, "We do not know." Analogy, however, with what we know of other parasitic organisms justifies us in believing that the form in which the parasites live outside of the human body is entirely different from that which they assume after they have entered.

With regard to the second question, "How does infection take place?" there has been much speculation. Three main ideas have been held:

(a) That infection occurs through drinking water.

(b) Through the inhaled air.

(c) Through the bites of insects.

The theory that infection occurs through drinking water is old and time-honored, and yet not only is the positive proof wanting, but there is considerable evidence against this hypothesis. The diagnosis of malaria is often, unfortunately even today, loosely made, and when we examine the evidence advanced in favor of the water-borne theory of the disease we find that much of what has passed for malaria is undoubtedly typhoid fever, which, as we all know, is only too frequently acquired in this matter.

Furthermore, many experiments have been made which tend to throw discredit upon the water-borne theory of the disease. Marchiafava and Celli, Mariotti, Ciarocchi and Zeri have all tested the question by the administration of water from the most malarious districts about Rome by the mouth, by the rectum and as a spray to individuals, who have voluntarily subjected themselves to the experiments. But though the experiments were in some instances continued through long periods of time, in all cases the result was absolutely negative. Grassi and Feletti administered dew collected from the most malarious districts, but without effect. They even went so far as to drink fresh blood from an infected individual—

blood which, if introduced hypodermically, will always cause a transference of the infection.

After all this it is but rational to conclude that it is unlikely that infection occurs through the normal gastro-intestinal tract. This does not mean that the parasites may not exist and develop in stagnant water, entering the system in other ways. Indeed, there is some reason to think that this may possibly occur.

One of the oldest theories in connection with the disease has been that infection occurs through the inspired air, and while no positive proof can be advanced in its favor it is hard for most to completely abandon this theory. Many instances of malaria occur when almost every other method of infection can be ruled out. Yet, as has been before said, evidence proving that infection occurs through the lungs is wholly wanting. Of late years there has been a strong tendency to return to an old idea, namely, that the infection in malaria may occur in many instances at least through the skin, the parasite being introduced by the bites of some suctorial insect.

As a matter of fact a sufficient number of individuals have subjected themselves to the experiment to prove that the disease may always be transferred from an infected individual to a healthy man by intravenous or hypodermic inoculation of blood. The same type of fever and the same variety of parasites are reproduced in the individual who is inoculated.

But especially interesting is the fact that within a few years several diseases in lower animals which depend upon the presence of a parasite in the circulating blood have been shown to be transmitted by the bites of insects. Thus Professor Theobald Smith of Boston, at that time connected with the Bureau of Animal Industry in Washington, showed that Texas fever in cattle is due to the presence in the blood corpuscles of a parasite closely similar to that of malaria, and this parasite is transferred by means of the cattle tick. A disease of animals in Africa, known as nagana, is due to the presence in the blood of a parasite, which is transmitted by the bite of the tsetse fly.

In man suspicion has fallen upon the

mosquito, and, indeed, there is much evidence which goes to suggest that the mosquito may play a part in transferring the malarial infection. In the first place, mosquitoes invariably exist in malarious regions, and malarial fevers are more prevalent at those periods when the mosquitoes are most abundant; they are especially numerous in regions about swamps and marshes, where the dangers of infection are greatest. In a malarious district there is greater danger of infection at about sundown and at night, but sunset and night are periods at which mosquitoes are highly active. The dangers of infection are greater near the ground than in elevated positions, but mosquitoes are more numerous near the ground. The danger of infection is greater on quiet nights than in windy weather, but wind is particularly unfavorable to the mosquito. Emin Pasha was so convinced that the bite of the mosquito played an important part in the etiology of malarial fever in Africa that he always traveled with a mosquito net, and escaped the disease. Bignami further has noted that in certain parts of Italy workmen who live in conical huts with a hole at the top, through which the smoke of their little fire passes, are unusually free from the disease, while those about them may be almost universally affected. Of course, the presence of smoke is one of the surest protection against mosquitoes.

Koch, who last year devoted some months in Africa to the study of malaria, was strongly impressed with the probability of this hypothesis. He says: "The more I study this disease the more I incline toward the opinion that the latter" (transference of the infection by means of the mosquito) "is the main, probably the only" (method). Wherever one goes he finds tropical malaria and the mosquito present together. On the coast (in East Africa) there are several places which are free from the disease. One of these is the island Chole, which lies upon the southern extremity of the Island of Mafia. "This is the only place on the coast where I could sleep without a mosquito net. In the mountains malaria stops at exactly that point where no more mosquitoes are to be found. Inland malaria

diminishes together with the mosquitoes. At those times of the year when there are many mosquitoes malaria is more severe." The natives of Usambara mountain often acquire the disease when they descend to the lowlands. They believe it to be due to the bites of mosquitoes, and call the disease by the same name which they give to the mosquito—"Mbu." Koch is, however, especially impressed by the analogy with Texas fever and other diseases of animals in which the parasites exist exclusively in the blood.

This is an interesting and seductive hypothesis. If we pursue it further we are immediately confronted with the question, how may the parasite enter the mosquito, and how may the mosquito introduce it into the human being? There are many possibilities in this connection. Let us consider what occurs in some other parasitic diseases. In Texas fever it is not the adult tick which transfers the parasites from one animal to the other. The adult tick feeds upon the parasites which infect the blood; the parasites live in some form within the tick, are transmitted to its descendants, and it is only upon being bitten by one of a new brood of ticks that infection is acquired. Another way in which insects may assist in transferring the disease is shown by the behavior of the mosquito and the filaria sanguinis hominis. This nematode has been shown by Manson to enter and live within the muscles of the mosquito. The mosquito, dying, very often infects water, which, if ingested by human beings, conveys the contagion.

Manson some years ago advanced the hypothesis that the mosquito might form an intermediate host for the malarial parasite as well as for the filaria, and that if mosquitoes were to bite infected individuals the organisms might continue to live in some form within the body of the insect, and, being set free upon its death, contaminate drinking water.

Beyond the fact that the development of flagellate bodies has been noted in blood contained within the stomach of the mosquito, and that Ross in India has noted, in several instances, curious pigmented bodies in the stomach wall of some insects, which had been fed upon

the blood of infected individuals, no confirmation of this hypothesis has as yet been obtained from the examination of human blood.

Recently, however, observers have turned their attention toward the parasites in the blood of birds. Birds are subject to infection with several varieties of organisms which are very closely analogous to the malarial parasites of men, and inasmuch as experiments of various sorts, impossible with the human being, may be readily carried out with birds, this field has seemed a particularly hopeful one for investigation.

Two years ago two of our students, Opie and MacCallum, made some interesting studies upon the blood of birds, confirming the observations of several other foreign students and noting certain further, as yet, undescribed features, of the avian parasites. And last summer MacCallum was fortunate enough to discover what is partial proof at least of Manson's hypothesis with regard to the flagella. While studying a certain variety of parasite in birds' blood he noted that whenever flagellation occurred some of the filaments, breaking loose from the mother body, rushed across the field to other full-grown parasites, parasites which Dr. Opie had previously noted were apparently incapable of flagellation. Single flagella might be seen to penetrate these full-grown forms. Only one filament ever succeeded in entering, though sometimes bodies of this nature might be seen surrounded by three or four flagella, which would butt their heads against them and, apparently, endeavor in every way to make entry. Shortly afterwards the body which had been penetrated changed its shape into a long pointed element, the pigment gathering at one end; it then became motile, advancing steadily across the field, destroying with its sharp point any red corpuscles which were in its way. These elements had previously been described by Danilevsky under the name of "pseudo-vermicules." This remarkable process, which has been repeatedly observed, can, from analogy, scarcely be other than an act of fertilization. The discovery may be said to have definitely shown that the

flagella are not degenerate bodies. The further fate of the pseudo-vermicules MacCallum was, however, unable to discover. He is inclined to suspect that they may be forms capable of development under other conditions than those offered in the body of the bird. There are numerous analogies in natural history which tend to support this view.

Within the last year Ross in India has carried out some excessively interesting studies which bear directly upon the manner of infection. Ross noted that the process of flagellation might occur in avian parasites as well as in those of human beings within the stomach of the mosquito. Furthermore, he noticed, when working with a particular variety of the mosquito fed upon birds infected with the proteosoma (a special variety of parasite), that a certain length of time after feeding, curious, large, pigmented bodies began to appear in the walls of the mosquito's stomach. The pigment of these elements was clearly derived from that within the parasites which had been taken into the body of the mosquito. These structures, which appeared in crops after every feeding of the mosquito upon infected blood, were observed to increase gradually in size, until finally, at the end of six days, they reached a very considerable diameter, nearly ten times that of a red-blood corpuscle. At this time, according to Ross, they protrude from the walls of the stomach into the body cavity of the mosquito. In some full-grown forms a curious radial striation was noted.

Later Ross found that in cases where the large elements had ruptured, the body cavity contained great numbers of small spindle-shaped, rather flattened structures, which he was able to prove had escaped at the time of rupture of the mother body. To these filaments was due the striated appearance above noted. After their escape from the mother body they circulate in the insect's blood. Ross also discovered the presence of two glands in the thorax of the mosquito, which consist of a number of plump cells arranged about ducts which finally unite, forming a common trunk opening into the proboscis—salivary glands which

probably convey the poison of the insect. In the cells of these glands great numbers of the filamentous bodies become accumulated. Suspecting that it might be by means of these structures that the infection was carried from mosquito to bird, he exposed healthy birds to the bites of insects which had been fed upon infected birds at a period such that the filamentous bodies must be present in the salivary glands. The experiment was brilliantly successful. Ross was able, in almost every instance, to produce an infection considerably more severe than was the case in birds where the source of the infection was unknown. Indeed, some of the birds died of the disease—an unusual result.

If, then, Ross' observations are accurate we have at last the demonstration that a parasite closely similar to the malarial organism in man may have two cycles of existence—one within its warm-blooded human host, and one taking place within the body of the mosquito which serves as an intermediate host, being capable later of actually transmitting the disease from infected to non-infected individuals.

And when we follow these observations step by step we cannot fail to be led to believe that the first stage in the process is fecundation, as observed by MacCallum. Ross has not as yet reported the manner of entrance of the parasites into the stomach-wall of the mosquito, but when we remember the extraordinary behavior of the pseudo-vermicule which arises from the fecundated parasite—its sharp point and the manner in which it is capable of piercing and destroying everything in its way—it would seem almost more than probable that it is in this stage that penetration of the intestinal wall takes place.

Not the least interesting point brought forth by these observations is the suggestion that a patient infected with malaria may be, through the help of the mosquito, a source of contagion to those about him.

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I have already spoken of the fact that three distinct varieties of the malarial parasite have been described. It is inter-

esting to note that these three varieties are each in turn associated with a definite type of fever. The quartan parasite, it will be remembered, has a cycle of existence lasting about seventy-two hours, and further possesses the remarkable characteristic that it is present in the blood of infected individuals in great groups, all the members of which are approximately at the same stage of development. Thus, in infections with a single group of organisms sporulation occurs at intervals of seventy-two hours or every fourth day. It has been shown that the paroxysm in malarial fever is always associated with the sporulation of a group of parasites, so that in such an infection the chill occurs every fourth day. There is reason to believe that the immediate cause of the paroxysm is some poisonous substance set free by the parasites at the time of their sporulation.

The tertian parasite, as has been said, has a cycle of existence lasting about forty-eight hours, and here, in infections with a single group, sporulation and the resulting paroxysm occurs every other day. The tertian parasite is the commonest variety in these regions.

But you may, perhaps, say that the commonest form of ague in Maryland is that in which chills occur daily. How are we to explain this? Very simply. In the great majority of instances two groups of the tertian parasite are present—one segmenting perhaps on Monday and Wednesday, the other on Tuesday and Thursday, the result being a chill daily. The same may and does occur in infections with the quartan parasite if three groups be present, while in some instances, in infections with two groups, chills may occur on two successive days, with a day of intermission between.

Rarely infections with multiple generations of the tertian and quartan parasite occur, resulting in irregular fever. It is also, curiously enough, rare for two groups to segment upon the same day.

The result of all this is that in infections with either of these varieties of parasites the symptoms are remarkably regular and periodical.

This is not the case in infections with the estivo-autumnal organism. Here the

cycle of existence varies very much in different cases, oscillating all the way from twenty-four to forty-eight hours, or even more. In addition to this, the tendency to the arrangement of the parasites in groups is also much less marked. So that while regular paroxysms *may* occur at intervals of twenty-four or thirty-six or forty-eight hours, the fever is often irregular or continuous. This is the form of parasite which is associated with the so-called remittent fevers which occur at the height of the malarial season.

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It may not be amiss to say a word before closing with regard to the amenability of these different forms of fever to treatment. All types of malaria yield to treatment by quinine. One may meet with malignant infections so severe that death occurs within twenty-four or forty-eight hours, before quinine has had the proper time to act, or where the paroxysms which have occurred have resulted in such injury to the human organism that, despite the disappearance of the parasites, death may ultimately follow; but the infection always yields to quinine. Relapses, however, may and frequently do occur. There are many individuals who treat themselves with a few doses of quinine at the time of their paroxysm, who have at more or less regular intervals of one, two or three weeks recurrences of the infection. This may go on for months or years, resulting in very material danger to the health and constitution of the individual. But the immediate attack will always yield rapidly to quinine, and if treatment is properly continued the danger of relapses is slight. It is perfectly safe to say that any fever in these regions which does not break after four days' treatment by quinine, properly administered, is not simple malaria. I have seen cases of malaria in which slight fever, strictly speaking, lasted longer than four days. Occasionally in severe cases a slight elevation of temperature may last for some time after the infection has disappeared, but the marked manifestations are always broken within a few days. It is a fact that continuous fever, non-resistant to quinine, is not malaria, and observations

with modern methods are showing us that the great majority of the cases which have been previously classed as malarial fevers, resistant to quinine, are really instances of typhoid fever.

But I have already taken more of your time than I had intended to, and I will come to a few general conclusions:

(1) Malarial fever is a specific infectious disease, due to parasites which exist in the blood of the infected individual in great groups and give rise to paroxysms at the periods of their sporulation.

(2) There are three varieties of malarial parasite—one associated with quartan fever, one with tertian and one with paroxysms which occur usually about forty-eight hours apart, but occasionally at more frequent intervals, while often the fever is irregular or continued—the estivo-autumnal parasite.

(3) Either of the first two varieties of parasite may also give rise to quotidian fever, owing to the presence of multiple groups of organisms undergoing sporulation on successive days.

(4) The paroxysms in infections with the tertian and quartan parasites are usually regularly periodical in their time of onset. In infections with the estivo-autumnal organism they are often irregular and associated with continued fever.

(5) We do not know how the parasites live outside of the body or how infection takes place.

(6) Experiments tend to show that it is improbable that infection occurs through the gastro-intestinal tract. It is possible, though not proven, that it may occur through the respiratory apparatus or through the skin, being introduced by the bites of insects, especially the mosquito. By analogy with the course of events in similar infections in birds it is highly probable that the mosquito may play the part not only of an intermediate host of the malarial parasite, but also of a direct transmitter of the infection from one individual to another.*

*Since the delivery of this address, studies by Grassi, Bignami and Bastianelli in Italy with the parasites of human beings, have entirely confirmed the observations of Ross on the parasites of birds. The entire extracorporeal cycle of existence of one of the human malarial parasites has been followed within the intestinal wall and salivary gland of the mosquito, and infection by means of the bites of such mosquitoes has been produced.

(7) Quinine, properly administered, is a true specific against the disease.

(8) Relapses may occur after weeks or months, but they are in turn amenable to treatment.

A CASE OF SARCOMA OF THE KIDNEY, WITH NEPHRECTOMY.

By Randolph Winslow, M.D.,

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THE following case was brought to the University Hospital by her physician, Dr. L. J. Turlington, on October 24, 1898, and was assigned to my service:

Katie H., white, aged twenty-one years, seamstress by occupation, single nullipara, with a good family history. She has had the usual diseases of childhood. She began to menstruate at the age of thirteen years, and has continued to do so every four weeks since, the flow lasting four or five days, without pain, until within the past two months. She is very nervous and has had frequent attacks of malarial fever, and had St. Vitus dance at the age of eleven years. When she was seventeen years of age she had a convulsion, and remained unconscious for two hours. The convulsions would continue at times for three or four days, recurring at intervals of fifteen minutes to two hours, and about this time she noticed pain in the lower part of the abdomen, but no enlargement. The convulsions, which were probably hysterical, have been gradually decreasing in frequency, and at present only occur every three or four months.

Last July, whilst walking, she experienced an uneasiness, as if something was "drawing up" in the lower part of the abdomen, and there was shortness of breath. This uneasiness has persisted and has become exaggerated, until she now is in pain almost all the time. There has also been increased frequency of urination, and at times the urine contained blood, but not at present. Physical examination: The patient is anemic, but very well developed, and says she has lost considerable weight during the past

six months. Upon exposing the abdomen, a tumor is seen on the left side, extending from the ribs to the pelvis, that is, from near Poupart's ligament to three inches above the umbilicus and from the lumbar region to several inches to the right of the linea alba. This tumor is smooth and elastic, ovoid in shape, and movable to a limited degree, and at one point there is a distinct nodule. The tumor is painful and is especially sensitive to pressure. It is dull upon percussion, and the colon resonance cannot be determined.

As the patient lies on her back the abdomen shows a marked prominence on the left side, as large probably as a five months' pregnancy. The heart, lungs and other organs appear to be healthy. Her digestion is good and her appetite excellent, but she suffers from constipation, and her bowels rarely move except when she takes purgatives. As already stated, she has very frequent micturition.

Urinary analysis: Acid, specific gravity 1026; some albumen, no sugar; epithelium, urates, red corpuscles and pus cells present.

She was examined per vaginam by my colleague, Professor Ashby, and her pelvic organs were found to be healthy. The diagnosis of sarcoma of the kidney was made, affections of the spleen being excluded by the more rounded contour, deeper situation and greater fixity of the tumor than would be found in hypertrophy of the spleen.

November 3, 1898, abdominal nephrectomy was performed in the amphitheater of the University Hospital. Two ounces of whiskey and a hypodermic injection of morph. sulph., gr. one-quarter, were given two hours before operation and repeated one-half hour before anesthetization. Ether was the anesthetic used, and she came under its influence readily and did not suffer from shock, her pulse being better after operation than before. She was swathed in cotton previous to being placed on the table, in order to preserve the natural temperature of the body as much as possible. The necessary aseptic preparation had been performed over night, the abdomen and thorax having been thoroughly scrubbed

with the stiff brush and green soap, shaved, washed with strong bichloride solution and alcohol and done up in hot bichloride towels, the bowels thoroughly emptied by salts and enema and the bladder catheterized. All instruments had been sterilized by boiling, as well as the silk worm gut and silk sutures, whilst the gowns, sheets and towels used had been sterilized by live steam under pressure. The operator and assistants, after thorough scrubbing of the hands and forearms with the brush and green soap, used the permanganate and oxalic solutions, and then the hot bichloride solution, 1-1000, and wore white cotton gloves, which had been boiled.

In this manner it was hoped that a perfectly aseptic operation would result, and as a matter of fact the temperature and pulse rate subsequent to operation remained as it was before. An incision was made in the left linea semi-lunaris, extending from the ribs to near the pelvis, and a cross-cut backwards to the quadratus lumborum muscle, freely opening the abdominal cavity. The descending colon was found overlying the anterior part of the tumor, which extended beyond the middle line of the abdomen. The meso-colon was spread out and looked as if a layer of muscular fibers had developed in it, resembling the tissue of the dartos. The posterior lamella of the meso-colon was divided and the kidney enucleated, bleeding vessels being clamped and tied. The tumor was strictly encapsulated and its removal was not very difficult. The ureter was very large and was ligatured low down. The renal vessels were rather small, and were tied. The growth arose from the pelvis of the kidney, and was filled with cysts containing bloody fluid and with soft grumous matter. Unfortunately the sac broke in extraction and some of its contents escaped, which were mopped up. The aorta was exposed for several inches in the enormous wound, which occupied the whole left half of the abdominal cavity.

During the separation of the colon from the growth the descending meso-colon was considerably torn from the bowel; this was sutured, and no harm resulted. The abdominal parietes were

partly sutured, leaving a large, open cavity, which was filled with gauze. The operation lasted about an hour altogether and the patient was not shocked. She suffered subsequently with nausea and pain for several days, and notwithstanding the free use of calomel it was impossible to move the bowels until croton oil in drop doses was administered.

With free intestinal action the nausea ceased, and she speedily resumed a normal condition. The urine was rather scanty for two or three days, but soon became sufficient in quantity. The wound discharged large quantities of bloody serum at first, and required to be dressed daily, the outer dressings being renewed, whilst the gauze packing was gradually withdrawn. As there was a great tendency for the large intestine to protrude when the dressings were removed, great advantage was derived from placing sterile rubber tissue next to the bowel and peritoneum, which thus shut off the peritoneal cavity and kept the gauze from adhering to the omentum and intestine. Her highest temperature after operation was 100 2-5°.

The large wound rapidly filled up, and she gained flesh rapidly, and left hospital on December 23 in excellent health.

Pathological examination of the growth was made by Dr. Wm. Royal Stokes, who pronounced it to be a round-celled sarcoma, arising from the connective tissue of the kidney or its pelvis. The kidney structure was not entirely destroyed, but was to a large extent spread out and thinned. The pelvis of the kidney was dilated and filled with old blood clots.

The prognosis is, of course, extremely bad; the growth will probably recur and cause her death, but she has had the only possible chance for life given her.

Remarks.—Solid tumors of the kidney are almost always malignant in character, and in a majority of cases some variety of sarcoma is found. Sarcoma of the kidney is found most frequently in childhood and youth, though it also occurs in old age, and very rarely in adult life. The tumor often attains a large size and may weigh many pounds. The symptoms of sarcoma of the kidney are

usually sufficiently distinct, and may be grouped under three heads: (1) Tumor, (2) pain, (3) hematuria. An abnormal swelling will be found on one or the other side, rarely or never on both; this enlargement grows forward and does not bulge in the loin. In its growth it displaces the intestines and pushes the descending colon towards the middle line, where it may be found by percussion or palpation to pass in front of the growth. The location of the colon may be rendered more apparent by inflation from the rectum. The tumor is usually smooth and rounded, and does not present any sharp or notched edge, and this is a point of distinction from affections of the liver and spleen. There is but little mobility to the growth, though in the case just reported motion could be imparted by strong pressure. Percussion dullness will be found extending from the loin forwards, and only interrupted by the tympanitic line of the colon. Pain and soreness will be quite constant symptoms, the pain radiating in various directions. Bloody urine is generally present more or less in sarcoma of the kidney, but this sign is also frequent in carcinoma of this organ. The symptoms and signs enumerated occurring in early life point with great certainty to sarcoma of the kidney. The prognosis of these affections is very grave; without operation it is hopeless; with operation we have to face a primary mortality of about 40 per cent., and if the patient survives the probability of recurrence is very great. Nephrectomy can be performed by either the abdominal or lumbar route. When the growth is not large it may be removed through the loin, and this is the preferable operation, and this is especially desirable in any septic condition. When a large tumor is present the abdomen must be opened, preferably in or near the linea semi-lunaris.

Note—February 3, 1899.—I am sorry to have to report that the unfavorable prognosis expressed above has unfortunately proven too true, and that a recurrence is already in progress.

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Professor of Physiology and Diseases of the Nervous System, College of Physicians and Surgeons, Baltimore.

READ AT THE ANNUAL MEETING OF THE BOOK AND JOURNAL CLUB OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND, JANUARY 25, 1899.

BIOGRAPHY is the incarnation of genius. The man and his work are in a way dissociated, and the more we are impressed by the latter the keener becomes our interest in the personality of the former. The creations of genius seem to us to have something more than human about them, and we turn with eager expectancy to the agent through whom the work has come. We may rave over the work of the great novelist, but we are not satisfied until we know whether he writes with a black or a blue pencil. We may be spellbound before the genius of the dramatist, but we must know whether his domestic life be a happy one or not.

For three centuries we have been doubting Shakespeare simply because of the paucity of detail regarding the man. In one of the early numbers of the *Spectator* Addison says: "I have observed that a reader seldom peruses a book with pleasure until he knows whether the writer of it be a black or a fair man, of a mild or a choleric disposition, married or a bachelor, with other particulars of a like nature that conduce very much to the right understanding of an author."

Now and then we have examples of the survival of a biography long after our interest in the work of the subject of it has passed. Who nowadays reads Dr. Johnson, but who does not delight in the inimitable biography of Boswell? And yet the great Cham said of Boswell, whom Irving calls the bear leader of the Ursa Major: "If I thought Boswell were going to write my life I would take his." The dust is rarely brushed from the "*Noctes Ambrosianae*" now, but what a delightful picture we have of Christopher North in the person of Professor Wilson? Is not the pleasure derived from the Waverly Novels enhanced by the lovable personality of Sir Walter? And while laughing

at the scintillating wit of Scarron, Heine or Hood, is not our admiration heightened when we think of the poor tortured bodies from which this wit emanated?

All biography should be interesting to medical men, since presumably those of our species who are deemed worthy of having the record of their lives preserved have distinguished themselves above their fellows, and from a biological or a physiological standpoint we should like to know why.

Was Praxiteles' hand or Raphael's eye more finely molded or more delicately constructed than falls to the lot of common mortals, or was the genius in the brain alone? What does the life history tell us of the brain of Aristotle or Kant, the eye of Cuvier or Darwin? If biography in general is interesting to medical men, how fascinating must be the records of the lives of their fellow-craftsmen! In one of Bulwer's novels there is a chapter devoted to the therapy of books, a chapter which every physician should read. Often there come to us cases that need the stimulus of a good book, and, as physicians, we should be as ready to prescribe books as drugs. We should not simply say, "Read a book," but should stand ready to prescribe this novel or that essay according to the effect we desire to produce.

And how about the doctor? Does he not suffer from the *taedium vitae*? Is there any profession in which the wheels need greasing oftener? City or country, crowded office or lonely night drive, no professional man needs more cheering than the doctor. General literature is all very well in its way, but it is not a delight to all. But where is the physician who will not be carried away by the history of the struggles and successes of some great worker in his own field—some master who has left an indelible impress upon the science of medicine? How eagerly we read of the early days of practice, the very inception of some great idea that was predestined to revolution science, discouragement, failure, success, fame? What a delight it is to find out that the fathers of medicine were, after all, so intensely human!

If we read aright we may learn lessons of incalculable worth from the lives of the great physicians. We see how they worked, how they mastered difficulties that at first sight seemed insurmountable, how they loved and honored their profession far above the scant homage of to-day, with what singleness of purpose they served science, how they served their day and generation and left the world better for having lived. What enthusiasm have we today to put beside that of Galen, who made a journey to Alexandria and spent a year there in order to study a skeleton, or of Harvey, who anatomized dogs and cats while traveling in the royal suite? If medical biography serves no other purpose it is yet useful to take the conceit out of us moderns.

In this day of the making of many books we do not realize the wealth of biography relating to medicine, and we fail properly to appreciate and profit by it. What a glorious record our profession has to show! Beginning with the earliest times we can trace all down the line of man's history a golden thread of pure science, now narrow, now broad, always tending to the establishment of truth. No profession can boast of such an heritage. Before theology was, before there was a science of laws, before the physical sciences, strictly so-called, existed, the science of medicine had firmly established herself. How ennobling, therefore, must be the history of the lives of the men who bore the torch of science through the darkness of chaos to the dawn of civilization!

It is hard for us to realize now that for many centuries all science was in the hands of the medical profession. Physiology, *Plusike Logos*, was as broad as nature herself.

The one light that has never failed is the light of science. Schools of philosophy have come and gone, theological dogmas have swayed the minds of men and then sunk into oblivion, but science has never taken a backward step. Often the church has forced an issue with science, but from the time of Galileo to the time of Darwin science has always come off victorious.

In these degenerate days, when the practice of medicine is looked upon as a trade, because, forsooth, in so many instances it is pursued merely as a trade, we are apt to forget our glorious heritage. We are the oldest guild on earth, and it behooves us to live up to the dignity of our great fraternity. Every medical school in the land should have a chair of medical history. Every medical student should go forth from the halls of his alma mater with a full knowledge of the grandeur and dignity of his chosen profession. He should know what influence was exerted by the works of Hippocrates, and should follow out the effects of the commentaries of Galen. He should study the writings and lives of Avicenna, Vesalius, Fallopius. He should note the epoch-making work of Paré and read his charming account of the dawn of surgery. He should make himself familiar with the life and works of Harvey. He should be on intimate terms with Sydenham, Boerhave, Pinel, John Hunter, Jenner and hosts of those great masters whose lives adorn the science of medicine.

"Some books," says Lord Bacon, "are to be tasted, others to be swallowed, and some few to be chewed and digested." In this latter category are surely to be placed biographies. What can be more absorbing or inspiring than the lives of the men who discovered the circulation of the blood, the microscope, vaccination, anesthesia, the germ theory, antiseptis?

What a stimulus to youth, what a delight to old age, the recorded lives of these great masters! How these stirring narratives push us on to fresh endeavor, revive hope, give promise of reward! And in the biography of the world's greatest where can we find such examples of courage, fidelity to duty, unselfishness, devotion to truth, as in the recorded lives of our fellow-craftsmen?

As Milton says, "Books are not absolutely dead things, but do contain a progeny of life in them, to be as active as that soul whose progeny they are; nay, they do possess as in a vial the purest efficacy and extraction of that living intellect that bred them."

Society Reports.

THE CLINICAL SOCIETY OF MARYLAND.

MEETING HELD FEBRUARY 3, 1899.

IN the absence of the president, Dr. Lord, the meeting was called to order by Dr. A. D. McConachie.

Dr. Cary B. Gamble, Jr., read a paper on "Erythema Exudativum Multiforme," reporting several cases, which was followed with remarks by Drs. Gilchrist, Fitcher and Abercrombie.

Dr. Randolph Winslow read a paper entitled "A Case of Sarcoma of the Kidney, with Nephrectomy" (see page 86).

Dr. Gilchrist spoke of the work of the Italian investigators with reference to the etiology of sarcoma and carcinoma, in which they claim that the cause of both carcinoma and sarcoma is the same.

Dr. W. B. Platt read a paper entitled "Vertebral Abscesses."

Dr. Bränham said that the question as to how these cases are better treated is one that has caused a great deal of discussion. He then spoke of a very interesting case he had recently, a girl fourteen years old, who had all the symptoms, including the family history, of the typical lumbar abscess. She had elevated temperature, with pain in the lumbar regions and afterward much agony in the right lumbar region. There was a large fluctuating abscess mass in the lumbar region, extending well behind the kidney, and everything pointed to tubercular abscesses. The abscess was evidently approaching the surface in the lumbar region, and he decided to give an anesthesia. Concluding that there was some other trouble, something more than tubercular abscess, he made an oblique opening through the posterior part of the abdominal muscles into the cavity, and found that the deep muscles had, in some way, become necrotic. He tried to get cultures, but did not succeed in getting anything very definite. There was an immense mass of necrotic muscular tissue in the deep part of the transversalis muscle, and the eleventh rib was also necrotic. The whole cavity was thoroughly cleaned out, flushed with bichloride solution, 1 : 4000, and sterile salt so-

lution. As far as the physical condition is concerned the patient is perfectly well, walking now without any limp at all; has regained her flesh and seems to have recovered entirely.

THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY.

MEETING HELD MONDAY, JANUARY 23, 1899.

DR. WM. OSLER presented "A Case of Double Congenital Cystic Kidney." The patient was a young woman, twenty-eight years of age and unmarried. About one year ago she first noticed blood in the urine, for which she could assign no cause, and this hematuria continued for about a week. She had no further trouble until December last, when she was seized with a severe attack of pain in the side, sharp in its nature, but not increased on deep inspiration and not associated with any chill or fever. The urine had been bloody the day before and remained so for two weeks. The frequency of micturition increased so that she had to pass water every hour. For nearly three weeks the pain in the side continued to recur in paroxysms. About this time she noticed that the abdomen was swollen and that her clothes had become too tight. She became somewhat weak and quite anemic from the loss of blood. An examination showed marked pigmentation of the skin, with slight similar changes in the mucous membranes, and in the flanks two large tumors could be felt, one on either side, the one on the left being the larger. There was no apparent increase in the area of liver dullness and no enlarged glands. There was slight hypertrophy of the heart and sclerosis of the arteries.

Dr. Osler stated that cystic kidneys are exceedingly rare, only about sixty-two cases having been collected up to 1893, and in only five of these was the condition recognized clinically, the great majority being discovered accidentally at post-mortem.

He believed in Virchow's theory that these cases of bilateral cystic kidneys are congenital, and that the individual may survive to adult life despite this condition. In seventeen of the sixty-two cases reported cysts were found in other

organs of the body. Such cases should not be operated upon, for, notwithstanding the fact that the kidneys are greatly enlarged and full of cysts, the tissue between these cysts may be perfectly normal. In the case exhibited the physical signs (excepting the skin pigmentation, which pointed to adrenal disease) pointed to a double congenital cystic degeneration of the kidneys. There were, however, other symptoms of adrenal disease, and the presence of hematuria, bilateral palpable tumors in the region of the kidneys, hypertrophy of the heart and sclerosis of the vessels are considered by Leichtenstein as diagnostic of cystic kidneys.

Dr. Thayer referred to a case which he had seen two years ago in consultation with Dr. Reinhart in which, after careful examination, they had failed to locate any tumors, the patient being a large, fat woman, and all the symptoms inclined them to the diagnosis of chronic renal nephritis. At autopsy, however, they found two large cystic kidneys.

Dr. Finney referred to a case seen a few years ago in the hospital in which the symptoms simulated those of an appendix abscess and led to his opening the abdomen, but as soon as the peritoneum was opened the condition was recognized and the operation abandoned. One of the kidneys had become infected and the cyst contained pus, which accounted for the rise in temperature.

Dr. H. Friedenwald presented "A Case of Plexiform Neuroma of the Eyelid." This patient was a young girl, aged fifteen, who presented a tumor of the right upper lid, which was so large as to practically close the eye. Dr. Friedenwald believed that it was a plexiform neuroma, though such a condition is exceedingly rare.

In discussion Dr. Theobald remarked that he had never had a case of this affection in his practice.

Dr. Penrose gave some new points in medical mechanics. He exhibited a table which he had constructed for use in the administration of anesthetics while the patient is in the knee-chest position. This table has been used considerably in Dr. Kelly's operating-room and had been found of great service.

He also showed a model of a gynecological operating table, so arranged that the patient could be placed in the Trendelenburg position by the anesthetist without the latter having to move from his stool. It was managed by a crank near the end of the table.

Dr. Penrose then referred to the use of salt solution, followed by oxygen inhalations, in the treatment of pneumonia, and exhibited an apparatus for its administration.

Mr. Verhoeff exhibited a new instrument for the estimation of heterophoria and the combining powers of the eyes. It was a new instrument which he had invented for measuring the muscular condition of the eyes, combining, in addition to the properties of the Stevens photometer, the ability to determine the combining power of the two eyes.

Obituary.

DR. GEORGE H. ROHÉ.

THE death of Dr. Rohé was a great shock to the profession. With few exceptions no one had an idea that his heart was affected. Dr. Rohé was a man justly admired by all whom his extended reputation reached. He was of most versatile ability. He was a skilled dermatologist, an expert gynecologist, an authority on hygiene and sanitary science, and of late years had become an alienist of such note that his work just begun at the Springfield Asylum will go on record.

Dr. Rohé was born in Maryland in 1851. He received his degree at the University of Maryland in 1873, and after some hospital experience began at once to practice in Baltimore. He had occupied various positions of trust and importance, and was a member of a large number of American and foreign medical and scientific societies. He was always a prominent figure at any medical gathering.

He was appointed health commissioner of Baltimore under Mayor Davidson, and later resigned that office to accept the position of superintendent of the Maryland Hospital for the Insane. Then when the State bought ground and ap-

propriated money for the erection of a second insane asylum, Dr. Rohé was given entire charge of this institution, and his excellent work, which he had only just begun, is well described by Dr. A. L. Gihon in the *Philadelphia Medical Journal* of November 3, 1898, in an article entitled "A Modern Madhouse."

Dr. Rohé was the author of several works which had a large circulation, and was at one time editor of the *Medical Chronicle* and collaborator on various medical and scientific journals. At the time of his death he was professor of materia medica, therapeutics, hygiene and mental diseases in the College of Physicians and Surgeons.

In his domestic relations he was most happy, and was a fond father and loving husband. He was a member of the University and Athenæum Clubs of Baltimore, and was one of the leading spirits of the Flint Club. While Dr. Rohé will be missed in many quarters, especially will the insane at the Springfield Asylum feel the need of his scientific care, for it will be no easy matter to choose a fitting successor to him, and there is great fear that an unfit political appointment may mar his excellent work. It has been difficult in these few words to pay a just tribute to the deceased.

Medical Progress.

NERVOUS DYSPEPSIA. — Dr. Grace Peckham Murray gives in the *Medical Record* her method of treating nervous dyspepsia. It is comprehensive, to say the least, but the suggestions are worthy of notice. She says:

"The treatment of nervous dyspepsia varies, of course, with the symptoms. The nerve sedatives are of benefit, notably bromide of sodium. When it has not a beneficial effect anemia is present. It can be associated with the bitter tonics. *Nux vomica* is the best of these, acting generally better than strychnine, and should be given in the liquid form, as the action of the bitter on the tongue stimulates the secretions. Carminatives should be used when there is much gas—the tincture of capsicum, or cardamom, or Jamaica ginger, or peppermint. These

are very useful in cases where there are sinking sensations and feelings of exhaustion. When there is overacidity the alkalies are demanded. Bicarbonate of sodium is the most generally useful. It can be combined with bismuth, which helps the irritability and hyperesthesia, which is often present. It is also good when intestinal indigestion occurs with the gastric indigestion. Some cases are improved by the acids, especially those accompanied with oxaluria and disturbances of the liver. They do not yield as satisfactory results as one would be led to suppose from the benefit derived from them in cases of pure neurasthenia. The results from pepsin are not often satisfactory; the wine or essence will sometime prove of benefit, but I have thought the result due more to the alcohol used in the preparation than to the pepsin itself.

"The diet should be simple and easily digested. In these cases, though, it often happens that foods one would not suppose could be digested are the ones that agree the best. In fact, it might be an aphorism that every stomach maketh its own digestion, and recently it has been proven that such is a scientific fact—that the secretions of the glands become adapted to the work in hand, and are such as will best take care of the food that the individual is in the habit of eating.

"In many cases of long standing, especially when there is a pouring out of the gastric juice, coating the stomach with thick and tenacious mucus, lavage or washing out of the stomach is very good.

"I have found electricity, too, very helpful. Where there has been inaction the faradic current acts the best. In other cases the constant current should be used. I do not think it is necessary to apply the current directly to the walls of the stomach by introducing the electrodes into the stomach itself."

* * *

THE TREATMENT FOR ASTHMA.—Dr. Sidney Martin, in the *British Medical Journal*, discusses the treatment of asthma and especially bronchial asthma, and says that while spasm of the bronchial tubes may be the primary cause of asthma, peripheral irritation from the in-

halation of insulting particles, disease of the naso-pharynx, such as polypi, and the pangs of indigestion all may bring on an attack. When the attack is on, then it needs vigorous treatment, and this is by the hypodermic injection of morphia, by the use of chloral or by the inhalation of chloroform, and small doses of any of these drugs will not bring about the required results. The inhalations of the fumes of such burning substances as stramonium and niter, or a powder consisting of one part each of anise and niter, two parts of stramonium leaves and five grains of tobacco leaves to the ounce, is very good. Cigarettes containing these substances often relieve when the powders fail. Lobelia is useful, but very nasty. These remedies are only to be used when the attack is severe, and cannot be employed continuously. For continuous use between the attacks and to keep them off are recommended especially potassium iodide and arsenic. Stramonium is often more effective when combined with the iodide. Disease of the naso-pharynx and disorders of digestion need prompt attention. The diet is to be most carefully selected, heavy, late meals not being allowed. Dr. von Noorden rather follows Trousseau in the use of atropine, beginning with a small dose, such as the one one-hundredth of a grain and continuing for six weeks or more until the dose has reached one-tenth of a grain, when it is to be gradually diminished.

* * *

PNEUMONIA IN PRIVATE PRACTICE.—So many cases of pneumonia occur that physicians have a varied method of treating this disease. Dr. M. Howard Fussell, in the *Medical News*, says that the proper treatment consists in rest and care of the heart. The horizontal position should always be maintained, and the bed-pan should be used and morphia to insure rest. For the heart strychnia, whiskey and digitalis are needed. He gives one-twentieth of a grain of strychnia every three hours. He has never used venesection, nor does he care for aconite and veratrum viride. He uses poultice applications, and also cold baths when the temperature is high.

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BALTIMORE, FEBRUARY 11, 1899.

In the *Outlook* for December 24, 1898, Dr. Henry Dwight Chapin has contributed an article upon "Hygiene for the School Boy and Girl."

Hygiene for the School Boy and Girl. The schoolroom, according to Dr. Chapin, may be considered the nursery of

the nation, and hence the importance of this subject. With reference to the housing of school-children, especially in the public schools, he considers it a great mistake to mass together large numbers under one roof.

This may be unavoidable in large cities, but it is never desirable, as it is difficult to avoid unsanitary conditions when 1000 or 2000 children from all sorts and conditions of homes are housed together in one building. Each child should be allowed at least twelve to twenty square feet of floor space and from 200 to 250 cubic feet of air space, according to age and development. These requirements are frequently not fulfilled in large schools. Ventilation by mechanical means is advised in all schools in which several hundred children are collected.

The proper lighting of the schoolroom is a point of very great importance. Statistics are given to show that there is a progressive tendency to nearsightedness in school-children, induced to a certain extent by the nature of their work and encouraged by defective

illumination. The furniture of the school-room may likewise have an important influence upon the child's health. If the seats and desks are too high or too low or not in proper apposition the child will be obliged to work in a constricted and uncomfortable position. In a recent examination of 1000 children in a public institution Dr. Chapin found that a little over 10 per cent. of the pupils had some posture defect, usually a beginning curvature of the spine.

In conclusion, Dr. Chapin appeals for the presence and advice of physicians in the matter of the education of the young. He considers that if they were more often asked to serve upon boards of education many mistakes so commonly seen would not be committed. We heartily concur in this opinion and hope that Dr. Chapin's article may help in the attainment of this much-to-be-desired end.

* * *

THE details of the centennial meeting of the Medical and Chirurgical Faculty in April are becoming more and more systematized, and the full

The Faculty's Centennial. programme will soon be issued. Besides the address by the president on Tuesday evening, and Dr. Keen's address on Wednesday evening, there will be special addresses by distinguished specialists from outside of Maryland. There will be public demonstrations and operations in the various hospitals, and those institutions on the east side will be visited on Wednesday morning, and those on the west side on Thursday morning. All hospitals will be invited to throw open their doors, and some of the large ones will give a public luncheon to their visitors.

There will be no regular scientific programme of papers by members of the Faculty, and with the exception of the president's address there will be no address or paper by a member of the Faculty. There will be an elaborate pharmaceutical and book exhibit, and there will be also a most interesting historical exhibit. The committee of arrangements is making every effort to procure portraits or any relics of the founders of the Faculty, and all those having anything of interest to the Faculty or knowing of any old portraits or relics of interest in connection with the Faculty or the profession of Maryland are earnestly requested to notify Dr. Wm. Osler or Miss Noyes, the Faculty librarian, at the earliest possible moment.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending February 4, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	1	..
La Grippe.....	..	9
Pneumonia.....	..	23
Phthisis Pulmonalis.....	..	24
Measles.....	16	1
Whooping Cough.....	7	..2
Pseudo-Membranous Croup and Diphtheria. }	33	10
Mumps.....	..	..
Scarlet Fever.....	14	..
Varicella.....	..	..
Varicella.....	4	..
Typhoid Fever.....	6	2

The State Board of Health advises vaccination.

The Hebrew Hospital in New York is to be enlarged.

The English colony at Rome will open a hospital there.

The death of Dumontpallier is a great loss to the profession of Paris.

Paris has enacted some special laws to prevent infection in laboratories.

The latest fad in Paris is to witness cinematograph exhibitions of surgical operations.

Dr. L. J. Middleton, a physician of Putnam county, West Virginia, died at his home last week.

Some of the sections of the American Medical Association have already announced their programmes for June.

Hot-water bottles and bags are now made of rice paper, covered inside and out with a coating of Japanese lacquer.

La Grange, N. C., has a medical journal called the *Southern Medical Journal*. Dr. J. W. P. Southwick is the editor.

The American Orthopedic Association will hold its next meeting in New York at the end of May and the beginning of June.

Dr. William Osler has accepted an invitation to deliver the Cavendish lecture for 1899 before the West London Medico-Chirurgical Society.

New York has a private hospital for scarlet fever and diphtheria patients. This hospital has a large corps of physicians and is evidently very flourishing.

The sale of thyroid preparations has been so much abused in Paris that the authorities have been compelled to take steps to restrict the sale of these substances.

The health commissioner of Baltimore is seriously considering quarantining against Norfolk and other places in Virginia where smallpox is so prevalent.

The valuable library of the late Dr. J. M. Toner of Washington was totally destroyed in Johnstown, Pa., recently. Over 7000 books and many valuable portraits were burned.

Dr. Charles W. Hardin, a respected and popular physician of Virginia, died at his home near Petersburg last week, aged eighty-five. Dr. Hardin studied at the University of Virginia and also at Philadelphia.

The centennial programme of the Faculty in April will be most elaborate if carried out in full. Many prominent men from other cities have been invited to make addresses, and already some of them have accepted.

Dr. Charles Fayette Taylor, the pioneer in orthopedic surgery, is dead. He founded the New York Orthopedic Dispensary and Hospital. He was born in Vermont, but settled in New York. Dr. Henry Ling Taylor of New York is his son.

There is a merry war between the physicians and druggists of Muncie, Ind., if press reports are correct. The physicians threaten to have their own drug store, and the druggists say they will find several good physicians, even if they have to go outside to get them, who will give their services free, provided the patients get their medicines at the drug stores. The results will be looked for with interest.

A medical congress of hygiene is to be held at Como, in Italy, in 1899, in connection with which there will be a solemn commemoration of Volta. Professor Baccelli, minister of public instruction, has been named honorary president of the organizing committee, which also includes the names of Professor Bizzozero, senator of Italy, and Professor Golgi. An exhibition of hygiene will be held in connection with the congress.

Washington Notes.

The bill to authorize the employment of women nurses in the regular army and military hospitals has been defeated in the House.

Acting Assistant-Surgeon H. L. Gilchrist has been relieved from duty at Albany, Ga., and ordered to Manila by the hospital ship Relief.

Dr. F. H. Morhart has succeeded Dr. A. W. Glover as resident physician at the Central Emergency Hospital. Dr. Glover has assumed his new duties at the Home for Incurables.

There are now twelve cases of smallpox at the isolating hospital, and the health department is kept busy quarantining infected persons and guarding houses in which victims have been found.

There were 136 deaths in the city during the last week, a mortality of 25.28 per 1000. Of these, fifteen were from grip, three from diphtheria and one from measles. There are eighty-nine cases of diphtheria and 159 cases of scarlet fever in quarantine.

At the society Wednesday evening Dr. Richey presented a paper, subject, "Eustachian Catheterization." Dr. Schweinitz reported the bacteriological examination of the milk from the Pasteur Laboratory for the year 1898. Dr. S. S. Adams reported case of sarcoma of brain, and Dr. Acker reported case of porencephalus.

Magistrate Pool is to be congratulated for the abolishing of the old courtroom custom of Bible kissing. This, the magistrate says, is not because of any religious motive, but because in the courtroom the Holy Book is a means of spreading disease. "Why should I compel a person to kiss a Bible reeking with filth, when I would no more think of kissing one of them than I would a mad dog."

Book Reviews.

THE SEXUAL INSTINCT; Its Use and Dangers as Affecting Heredity and Morals. By James Foster Scott, M.D., Washington, D. C. New York: E. B. Treat & Co., 241-243 West 23d street. 1899. Pp. 436. Price \$2.00.

In the author's words, "the design of this work is to furnish the non-professional man with a sufficiently thorough knowledge of matters pertaining to the sexual sphere—

knowledge which he cannot afford to be without."

It is a book for men rather than boys, and one, we may add, from which many physicians themselves may draw helpful material in molding their own opinions and statements on the vastly important theme of personal purity.

That gynecologist or genito-urinary specialist, for example, must be indifferent indeed to the best interests of his patients who has no counsel to offer in the way of stemming the tide of impurity which brings many a wreck of innocent womanhood to his operating table.

Dr. Scott justly arraigns the daily press, which almost without exception, in our midst, "permits the obscene advertisements of charlatans and abortionists to appear, thus disgustingly aiding in the work of criminal malpractice and being most efficient accessories in the abhorrent iniquity of feticide."

The legislatures should enact laws to prevent the public press from thus dealing in blood money. Lombroso is quoted as saying: "Another occasional offence, specifically local, is abortion in the United States, where it is so diffused that public opinion has ceased to condemn it. In proof we have the advertisements of doctors and female midwives who practice chiefly in this branch and recommend their establishments in newspapers and on posters."

Dr. Scott sees in this an additional reason why "it is greatly to be desired that Congress shall create an additional office for a cabinet minister, who shall be the director of a national bureau of health, thus disseminating knowledge and bringing about much-needed reforms."

REPRINTS, ETC., RECEIVED.

Gross Medical College, Denver, Colo. Circular of Information and Register of Students. 1898-1899.

The *Revue du Praticien*, published the 15th of each month at Paris, now announces its change to a weekly publication.

The Treatment of Chronic Enteritis. By C. E. Hershey, C.E., M.D. Reprint from the *Western Medical and Surgical Gazette*.

Vitality: An Appeal, an Apology and a Challenge. By Lionel S. Beale, Fellow of the Royal College of Physicians, etc. Reprint from the *Lancet*.

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Original Articles.

VERTEBRAL ABSCESSSES.

By *Walter B. Platt, M.D.*,
of Baltimore.

READ BEFORE THE CLINICAL SOCIETY OF MARYLAND,
FEBRUARY 8, 1899.

If any excuse were needed for presenting to your consideration the subject of vertebral abscesses it could be found in the fact of their frequency, their deforming, disabling and often their fatal final result, and in the ease with which they may usually be detected by exercising proper care at an early stage while they are yet small and capable of arrest or cure.

By vertebral abscesses is meant those collections of fluid holding particles of solid or semi-solid matter in suspension, which owe their origin to a diseased process in the vertebrae. At the time of their discovery their situation may be remote from the beginning and the diseased vertebrae may long since have become functionally normal. Some of these abscesses, as those called psoas or iliac, require months to reach the surface; some always remain deeper, until finally absorption takes place. Actinomycosis, syphilis, osteomyelitis and malignant growths must not be forgotten as possible, although very infrequent, causes of vertebral abscesses. The real frequency of actinomycosis is scarcely known, but it will probably be found more frequently to be the cause of spinal abscess than is now supposed. It is said not to cause spinal deformity. Malignant growths in this situation are usually secondary to mammary cancer.

Billroth and Mentzel out of 1996 autopsies in cases of bone tuberculosis found that 35.2 per cent. of these were those

of tuberculosis of the vertebrae. When we consider that nearly all of these were in individuals over ten years of age it is probable that the proportion would be higher if all ages were included. (König, "Specielle Chirurgie.")

Now of all cases of vertebral tuberculosis it is estimated that one-half are accompanied by abscess at some time during their course. Rushton Parker (*British Medical Journal*, January 14, 1887,) gives interesting statistics as to the frequency of abscess in the different regions of the spinal column. In eighty-two cases of dorsal caries there was abscess in 8 per cent.; in twenty-one cases of dorso-lumbar caries abscess occurred in 30 per cent., while in thirty-seven cases of lumbo-sacral disease abscess occurred in 70 per cent. of the cases. Some elaborate statistics have been made from a large number of cases showing the respective liability of a number of different vertebrae to disease. These will not be referred to. It is probable that the proportion of abscess to the whole number of cases of vertebral caries will diminish as better treatment is more generally employed.

The primary seat of the disease in question is in the bodies of the vertebrae in the great majority of cases. It may be detected at the very beginning in a Haversian canal, arising from an embolus of tuberculous material. It varies from a very minute size to the destruction of the bodies of entire vertebrae and the intervertebral substances. Very considerable abscesses may originate from comparatively small foci, that of a currant or a cherry. It is most commonly situated close beneath the upper or lower surfaces of a vertebra, thence extending downward or upward, involving the intervertebral substance and the adjacent verte-

brae. In one of the worst cases of vertebral abscess which ever came under my observation autopsy showed almost complete destruction of the bodies of four vertebrae. Bone tuberculosis, as is well known, is markedly prevalent where tuberculosis has existed in a family for more than one generation, and is found in individuals with cheesy deposits elsewhere as primary sources of the bone infection.

Tubercle bacilli lodging in a bone which offers a good soil of lessened resistance, a low type of granulation tissue is produced. This becomes caseous and the cheesy substance either now becomes encapsulated, absorbed or calcified, or else it acts as an irritant to the neighboring tissues, and, while extending in the periphery, breaks down in the central portions. This is followed by a thin fluid, in which are particles of the cheesy substance and "bone sand," and we have our tuberculous pus, so-called,—really not pus in the ordinary acceptation of the word, as it contains none of the common pus-producing bacteria until it becomes infected from some other than the original source, usually from without. We find in this pus abundance of leucocytes, and rarely tubercle bacilli, while cultures produce them readily from the cheesy matter in most cases.

So much for the thin, whey-like, pale-yellow fluid, in which are seen crumbs of cheesy detritus and often minute fragments of bone, easier to be felt than seen.

The walls of these abscesses are of especial interest and characteristic of tuberculous abscesses. At a first glance they are not unlike the degenerated wall of a wen or congenital cyst of the subcutaneous tissue.

I recall an error of diagnosis where a boy entered the Garrett Hospital with a swelling on the anterior surface of the thigh, half way down. This was the size of a small orange, not tender, and had a history of a slow, painless increase. There was no lameness except such as might arise from the slight pressure upon the underlying parts and the tension of the skin. The hip joint showed no impairment of motion, tenderness or swelling. There was no fever. The diagno-

sis of congenital cyst was made. When freely opened a large quantity of cheesy material escaped, with some fluid. The lining membrane which was removed was very like chamois leather, only more readily torn. The abscess or cyst, as it seemed, was cleaned up and packed. It did well and healed. Within six weeks the patient developed unmistakable signs of hip disease, and the supposed cyst was nothing more than a cold abscess, with some minute canal of connection with the tuberculous bone.

Next to the focus or foci of the disease in the vertebrae the lining membrane of the abscess is the most dangerous, if not quite as dangerous to the economy of the former. In many cases it is seen to be sown with miliary tubercles on the inner surface, and it must be evident that no cure of the original disease can be expected which does not take into consideration this lining membrane.

The danger of bone tuberculosis to life and health is only in a degree due to the bone lesion. From watching a large number of hospital cases of this kind I am convinced that the tuberculosis of the soft parts, following that of the bone and due to it, is the predominant causative agent in the fever, and suppuration, and in the ill-effects which in turn are due to these. This is perfectly shown in those cases in which the bone lesion is not touched, but the abscess cavity only is curetted, wiped and disinfected and packed or injected. The immediate effect in most cases where this is done is a complete disappearance of all the symptoms we are wont to attribute to the bone tuberculosis directly.

Muscle tissue is very resistant to the inroads of tubercle bacillus; so much so that eminent observers have claimed that when we find in muscle substance what appears to be a tuberculous abscess we may rest assured that it is due to syphilis and a broken-down gumma instead of softening caseous matter. That muscle substance disappears when in long contact with a cold abscess is often seen in the case of psoas abscess, where the muscle sheath is sometimes all that remains to show the former location of the muscle itself.

Cold abscesses, by preference, work along lines of least resistance, along intermuscular spaces, and consequently assume all sorts of shapes. They may be flat or sausage-shaped, and sometimes they are like the shape of a hand, with finger-like, blunt ends, projecting three or four of them in different directions. This is especially true in hip-joint abscesses. The interior is slippery, more so than most mucous membranes, and their mouth, where the sinus comes to the surface in subjects of small resistance, is surrounded by a semi-transparent, closely-adherent, gray, gelatinous substance.

The prognosis is so closely related to the treatment that they will be considered together. Taking a psoas abscess as a type of a vertebral abscess, it may burrow and open almost anywhere below its source. It is often seen far down the thigh, and it may burst into the peritoneal cavity, although this is so rare as to be hardly feared in any given case. Occasionally it opens into the intestine, with a resultant hopeless infection of the abscess. A psoas as large as five inches in diameter is very likely to open sooner or later rather than undergo absorption.

In a case now under my observation, the patient, a young woman of eighteen, there has been a psoas abscess for ten months. I saw her four months ago for the first time. During this time the abscess has slowly undergone absorption, so that it can now be felt only on very deep palpation, and occasions no symptoms. Prolonged, absolute rest in bed, fresh air, pills of iodide of iron, and, finally, a well-adjusted spinal support, have brought about a complete restoration to health. The abscess appeared to be about four inches in diameter and probably two inches thick. It did not reach Poupart's ligament, and has not been aspirated or punctured. It seemed to originate from the last dorsal and first lumbar vertebrae. Given the diagnosis of a vertebral abscess and the life and health of the patient may depend on the direction the treatment takes.

In a retro-pharyngeal abscess of any size the only course is to evacuate the fluid and hope that no infection will occur. If these abscesses can be evacu-

ated from the neck behind the sternomastoid—and this is sometimes the case, owing to a swelling in this region—it is far better to open there. The same necessity to open the post-esophageal abscess does not exist, that is, the urgency is not as great. A retro-pharyngeal abscess often simulates croup, and, suddenly bursting into the larynx, may suffocate the child before it can be helped.

The prognosis of a post-esophageal abscess is distinctly less favorable than that of a retro-pharyngeal. An important point in opening these retro-pharyngeal abscesses is to have the head of the child so arranged that the pus will flow out of the mouth instead of into the throat. If possible an anesthetic had better be dispensed with, so as to secure the aid of the child in coughing up or expectorating the pus. When an abscess due to vertebral tuberculosis approaches the surface in the neck it had better be opened without delay, as otherwise it may burrow in any direction.

The non-operative treatment of vertebral abscesses consists in early rest in bed until such symptoms as pain on slight motion and fever have disappeared and a steady diminution, or at least a standstill, has occurred. A firm mattress, with a low pillow, careful attention to the skin and every expedient to preserve and increase nutrition should be adopted. If a child, the patient had best be fastened to a Bradford frame, put in bed and kept there as long as he continues to improve, as shown by the slow diminution in the size of the abscess and the cessation of all spinal symptoms.

The exceeding great importance of the constant supply of fresh, pure air and plenty of light, such as can best be had in the open air, cannot be exaggerated. Darkness and bad weather should be almost our only excuse for having a patient indoors. If in summer, tent life is the one for the patient to lead. Horizontal decubitus, immobility of the spine and fresh, open air are the three great essentials for the early, conservative treatment of spinal abscess.

Before patients with vertebral abscesses come under the care of the surgeon they have undergone so much dis-

comfort, and they experience such relief from the measures advised, that they are most tractable and grateful and willing to follow out the treatment. In many cases the abscess will be seen to slowly disappear from our observation. Six weeks to three months, or even a year, in bed may be necessary in cases of spinal abscess.

If we are compelled to choose for early treatment between rest in bed in a close atmosphere in a small, dark room, and plenty of open air, with a good spinal support, of course the latter will be chosen and the chances taken. I have thought that benefit was derived from the use of a permanent pill of iodide of iron, persistently administered for months, as well as from the use of cod-liver oil, but all of these in true curative effect are far behind the other agents previously mentioned.

Of course, the most rational treatment of any tuberculous local affection is to eradicate it locally, take it out, remove it, root and branch, and leave none of it behind. If such an attractive programme could be carried out our patients would take up their beds and walk in a few weeks from the time we did them this great service. Naturally good surgeons (who are good anatomists before they are surgeons) immediately after the advent of antiseptic surgery tried to carry out this excellent general idea, and a few successful cases which were reported (others having joined the silent majority) excited the hopes of surgeons everywhere that this might often be done.

Further experience has taught that while in very exceptional cases the tuberculous focus in the vertebra has been removed, this is seldom possible, as the foci are usually inaccessible, multiple or invisible, and that the surgeon, man, must yield to the physician, nature, if he expects the bone to become approximately normal in function. His gross efforts to take away are not as efficacious as her finer ones to wall in, dry up or calcify.

When operation on the bone is contemplated it is generally only where there is a convenient lumbar abscess leading the way directly to the diseased part. In these cases it may often be felt eroded, rough, a part of the area crumbling. What

is accessible may be cautiously curetted out, but the result is, what one gets in partial removal of tuberculous bone and other structures elsewhere, unsatisfactory. One has but to look at the large veins in the immediate neighborhood to see how easy it would be to do far more damage than good in the absence of a thorough and satisfactory inspection of the diseased bone.

One of the first things to determine in the operative treatment of a cold abscess is how much of the suppuration, fever and disability is due to the abscess and how much to the bone. Possibly the bone lesion may be already encapsulated and harmless, and the thorough cleaning out and scouring of the abscess may be the end of the whole matter. While this happens in some cases the chances are that a number of months or perhaps years of watching, waiting, operating, rest in bed or skillful treatment by means of mechanical supports will be necessary before we are sure that our abscesses have taken their final leave. If an abscess is of moderate size, and there is no sign of thinning of the skin, and the general condition of the patient good, we should abstain from opening a vertebral abscess, supposing it to be from dorsal or lumbar disease. Absorption and disappearance of the abscess without operation is the end to be striven for.

If in the special case it is decided that evacuation of the abscess contents is best the incision should, above all things, be made antiseptically and forever kept antiseptic until it is healed. After days and weeks (if it should last as long) the danger of serious infection is markedly diminished as a rule. It is fortunate that this is the case, as they are nearly always infected, after a time, by pyogenic cocci, even in the best regulated hospitals, where they are dressed daily.

In opening a vertebral abscess we hope that one of two things may occur—either that the abscess may heal, because the original disease in the vertebrae has ceased, leaving only the cold abscess, and this, being properly treated, will be cured, or that a free outlet for the pus being provided, and the track of the abscess being kept antiseptic under favor-

able conditions of rest and strong tonic and hygienic treatment, the original disease in the bone may now heal and the abscess soon afterward. Suppose this to fail and the pathological process in the bone continues, we have at least done what we could and probably added some years to the patient's life, even if he have a sinus all that time.

One very useful man in this community, well known to most of us, has a psoas abscess, due to dorsal caries of the spine, which has had the most skillful treatment in vain as far as obliteration of the abscess is concerned. His sinus gives him but little inconvenience. He walks about and performs all the functions of a normal and useful member of the community, and has done so for a number of years.

In any given case we can never predict that a vertebral abscess will certainly be cured. Even what we believe an accomplished fact may turn out to be a temporary success. A more satisfactory procedure is to thoroughly clean out the abscess by evacuating the contents, cautiously curetting away the lining membrane, wiping out the abscess cavity in succession with plain gauze and iodoform gauze, and then inject with a 10 per cent. iodoform emulsion and sew up the incision. This will frequently cure the abscess and it will never refill. Other surgeons, after cleaning, simply drain, washing out the abscess daily if necessary, or allowing it to drain spontaneously, and claim good results.

Treves says he has never had to clean out an abscess more than twice, and often but once, to effect a cure. This can hardly be the experience of many or most surgeons, nor is it conceivable that any amount of cleaning would heal an abscess where there is constant pus production from the bone at one end. When a psoas abscess pointing beneath Poupert's ligament can also be reached readily from the lumbar region the prospect of a good healing is better than when the first opening alone is made.

In spite of all we can do certain patients will have sinuses which we cannot heal and which will continue to discharge from time to time or else constantly to

some extent. In these cases the most we can do is to reduce this to a minimum, maintain the strength as best we may, and then watch our patient's liver slowly increase in size, see the albumen in his urine persist, the pallor of the amyloid disease become a part of his individuality, and, finally, after some years, see our patient die—a painless death, it is true, but we have not cured our patient.

I recall a case where a child with a psoas abscess enjoyed her life as much as most children for four years. At the autopsy the amyloid liver was found to be immense, extending upward to the second rib, compressing the right lung almost to obliteration. The bodies of four vertebrae were almost totally destroyed. The sheath of the psoas muscle proper contained the psoas abscess. There were two sinuses in the right thigh and one in the back. This child had most unremitting care, generally and locally.

LATERAL CURVATURE OF THE SPINE AND POTT'S DISEASE.

By A. M. Phelps, M.D.,

New York City.

ABSTRACT OF REMARKS MADE BEFORE THE RICHMOND ACADEMY OF MEDICINE AND SURGERY, JANUARY 24, 1899.

IN presenting this subject to you I wish to give some practical points which, although not new, must be remembered in order to treat these cases intelligently. It has been but a few years since the treatment of these affections was a bugbear to the general practitioner, who sent every case to the specialist. Now, however, with a better understanding of what they are and their remedy, he attends them himself.

Regarding Pott's disease, any stated paper would take at least a week to read. I shall lay before you some material and a few facts, which will cover the subject well. So many conditions are described as Pott's disease that it is first fitting to say that the true one is tubercular unquestionably; those not tubercular are

not Pott's. The disease was described by Pott as tubercular disease of the ends of the bone or cartilages. Following typhoid fever, there may be acute pain from absorption of the results of inflammatory changes in Peyer's patches, but it is septic. Then mycosis may afford opportunities for mistakes, or a child may suffer an injury, an abscess may result with development of septic symptoms, but this trouble is osteo-myelitis, not Pott's disease.

Etiology.—It is a true infection of the bacillus tuberculosis into a focus of previous inflammatory action; that it inoculates tissues not embryonic is impossible. As the area of inflammation extends inoculation takes place, with a destruction of bone, formerly termed caries, but this term had better be dropped. The disease may attack the intervertebral cartilages. Why is it that of two children receiving an injury one will develop Pott's disease and the other not? Because the former is strumous. Struma is a condition of the protoplasm making up the ultimate cell; it is a state in which one cell succumbs to germ life and the other resists it. It is born with the child, and is seen typically in the slums of any large city, being imported to this country by the people who lived in the walled cities of Europe. It will take America 1000 years to grow children free from this condition.

Here is a preserved specimen of the spine taken from a patient with Pott's disease, in which one vertebra is destroyed and its neighbors are consolidated, showing the projection of the spinal processes posteriorly. It is typical. Here is one of rheumatoid arthritis, which might have been taken for Pott's disease. This illustration shows destruction of the cord from projection of bone into the canal. And here is a case of extreme kyphos, but without pressure on the cord.

Diagnosis.—Lateral curvature differs from Pott's disease in that it is never produced by inflammation or disease of the spinal column except rickets. Positions in utero produce it, as in short leg. Frequently it is tried to diagnose lateral curvature when Pott's disease is present. It is a symptom of the latter. A diagnosis

of this kind would result disastrously, because the treatment of the two differs. It must also be diagnosed from pseudo-hypertrophic paralysis.

Before deformity begins is the correct time to make the diagnosis. (After deformity has occurred it is easy.) In the beginning there is difficult breathing (often treated for asthma or worms). If the child is lifted it will cry. It has "bellyache," and it holds its hand flexed to its side. There never was disease of a joint in which motion was not limited from muscular spasm. If the spine is flexible it is not Pott's disease; if it is rigid you may be absolutely certain it is. This boy (exhibiting a negro youth) has a flexible spine, although lateral curvature is present. If a baby has Pott's disease, and you raise it by its head, it will come up stiff; if not it will roll up like a ball.

There is always pain (usually anterior) in Pott's disease, but not in lateral curvature. If high up it is in the chest; lower, in the stomach; still lower, in the abdomen. After the case has gone on there occurs muscular atrophy and then deformity, but no swelling. On one side the bodies of the vertebrae are absorbed, but on the opposite side they are normal.

There is not a single straight spine in the world; if so a man would break his head every time he jumped six feet. Every lateral curvature to be cured must have a compensating curve, so as to allow the vertical through the center of gravity to fall between the feet. In some patients, e. g., those with rickets, the curvature is due to pressure. Ossification is sometimes due to central-nerve lesion. Other curvatures may be caused by injury.

Treatment must be based on rational principles. I would treat lateral curvature with gymnastics and a support to remove pressure. Pott's disease is to have the same treatment as a broken leg, i. e., fixation, to give nature a chance to repair.

Lateral Curvature.—Some say that every brace produces atrophy; others that bracing is all that is required to remove pressure and prevent absorption. Bracing, properly done, does not produce

absorption. A very good plan before beginning treatment is to determine the extent of bone changes. Have the patient to bend forward; then the application of a straight line along the back will show the extent of deviation. Find the size of the vertebrae and then brace. The diameter of the column is usually two inches. If deviation is one-half of this a mechanical appliance is absolutely necessary to obtain stable equilibrium, producing thus one curve to balance the other.

A child under three years cannot be braced, for the pelvis is too small as compared with the thorax, and the retaining strap will slip. Put on a Sayre's cuirasse or a plaster of Paris portable bed. The latter is also of benefit in Pott's and hip disease. I got the idea from observing an Indian squaw carrying her baby.

Regarding spinal bracing, where the band around the pelvis is narrow and small there is tilting. I believe that suspension and then fixation is necessary. The Hessing corset was invented in 1764 and forcible replacement in 1768 and then abandoned, and we will have to do likewise. Sayre was the first man in this country to make a suitable apparatus for Pott's disease and lateral curvature—the plaster of Paris corset. Notwithstanding that it is heavy, cumbersome and wears out, it is the best of all braces. He marked a new era in the treatment of these diseases when he suspended the patient and thus removed the pressure. Afterward it was sought to use other materials, and then came leather and rawhide, which proved valueless.

I went to Odessa to learn to make the wood corset, and was pleased with it, but as soon as perspiration occurred its shape changed and the patient became shorter. Then I invented the apparatus which I here exhibit, viz., the aluminum corset. Its life is from fifteen to twenty years. It was first made in lateral halves, but, proving cumbersome, the duplex hinge was added, and now it can be put on and laced as the ordinary corset. In lateral curvature, with proper gymnastics, it will cure.

The new operation of forcible replacement was used by Hippocrates 500 B. C., forgotten, revived in the time of Ambroise Paré (fifteenth century), again forgotten,

and finally revived recently. Any authority commenting upon it says the results are too good to be credited. I am very sure that old cases with ankylosis, great deformity or abscess should not be touched. In beginning cases, pressure and then treatment as described before may avail, but the vertebrae must be wired. Even then in two or three years they will be found bent.

THE NEEDS OF THE QUARANTINE STATION.

By John Ruhräh, M.D.,

Quarantine Physician, Baltimore.

It may not be uninteresting at this time when the needs of the municipality are being so freely discussed to glance at the needs of the Quarantine Station. The average individual of the city knows that there is a Quarantine Station and that is about all. The physician, with his knowledge of quarantine stations in general, imagines at once a perfectly equipped place, with all sorts of disinfecting apparatus and a modern hospital for infectious diseases and large, roomy barracks for the sheltering of suspects.

These things exist only in imagination. We lack here the better means of fighting disease and for caring for the sick and the suspect. We are using the methods of years ago, knowing all the while that they are antiquated and indeed inefficient in a measure. Baltimore is so infected with the spirit of "*laissez faireism*" that it hesitates to spend money in getting the equipment of the departments up to a modern standard. Particularly is this so in the matter of municipal health matters.

Leaving out the minor matters of such an establishment, we may reduce the needs to three principal ones:

1. A modern disinfecting tugboat for the disinfection of vessels.
2. A modern hospital for infectious diseases.
3. Barracks for the detention of suspects.

1. A MODERN DISINFECTING TUGBOAT.

This is merely a large boat built on the plan of a towing steamer, and fitted with

the necessary apparatus for the disinfection of steamships. The apparatus in question consists of a steam disinfecting chamber large enough to hold several mattresses at a time or material of equal bulk, a tank for bichloride of mercury solution and a pump and hose for using the same, and a sulphur dioxide generating furnace, with the necessary hose and attachments.

The present method of disinfecting a ship consists in taking all the bedding and other like material to the disinfecting chamber on shore and disinfecting them there. This means the handling of the material an unnecessary number of times. It must be first loaded on the tugboat and then unloaded at the wharf into a cart; the third handling is from the cart to the disinfecting chamber; the fourth from the chamber to the cart again; the fifth from cart to tugboat, and the sixth from boat to ship—six handlings, where two would have sufficed with a disinfecting chamber on the boat—directly from ship to disinfecting chamber and back again, the method used at all perfectly-equipped stations.

Instead of washing down the compartments of the vessels with buckets of bichloride and mops, the hose from the boat could be used to spray it thoroughly in all parts of the vessel where needed; and, lastly, instead of burning sulphur in pots and so getting an unknown quantity, and even if known an insufficient quantity in the compartments, a sulphur gas of definite 10 per cent. strength could be rapidly thrown into all compartments from the sulphur dioxide generator. The advantages from this method would be twofold. In the first place the disinfection would be more sure, we might say practically perfect, and in the second place there would be considerable saving of time.

The reasons for having a second boat are not confined to the matter of the disinfection of ships. The business of the place requires two boats. We have at present one, and make out as best we can, hiring another when the occasion becomes so pressing that we cannot in any way devise means for preventing it. A second boat thus hired costs more than

the running of a boat would cost if the city owned the boat, and we could have the use of it all the time, together with the advantages above mentioned. Thus for a comparatively small outlay of money the city could save the amount in a few years.

2. A MODERN HOSPITAL FOR INFECTIOUS DISEASES.

The hospital building at the Quarantine Station is about as much fitted for a hospital for infectious diseases as is the barn. It has only one advantage, one which should not be underestimated—the abundance of fresh air that the patients get; otherwise it embodies about all the "ought nots" of hospital construction. There are four large wards, having more or less free communication, although the architect evidently fancied he was cutting off all communication when he ran a partition between the two sides of the building. He then placed an elevator, with large doors opening on either side, between them. He then placed a nurses' room conveniently at the end of the partition, with doors opening into either side of the building, so that the nurse could go from one ward to the other in his duties, from smallpox to yellow fever. Then, not satisfied, he saved kitchen space by making the one small room communicate with both sides directly.

Without going into the multitudinous defects of the building, suffice it to say that while it might be utilized for barracks, as will be shown later on, it is totally unfit for the purpose for which it was designed. With such a hospital it is merely a case of do the best you can and not what ought to be done.

What we need is a hospital constructed on the pavilion plan, with small, easily-heated, easily-disinfected wards, the connections between them to be open-air corridors. One small building for smallpox, another for yellow fever, a third for any other infectious disease and a fourth for sick suspects would answer all the requirements. In a word, they should have impervious floors, washable walls and the most modern ventilating apparatus, together with good plumbing and water supply and good heating apparatus.

3. BARRACKS FOR THE DETENTION OF SUSPECTS.

When a ship is held for disinfection, if it is for yellow fever or any other quarantinable disease except smallpox, the personnel of the vessel must be held for a period covering the incubation period of the disease in question. As it is now, the vessel must be held too, as there is no place to hold the crew except on the vessel. If there were barracks for these suspects the vessel could be allowed to dock immediately after the completion of the disinfection.

If the hospital building were replaced by a suitable set of buildings for hospital purposes, the present hospital building could be utilized, after thorough disinfection, for the purpose of barracks. The building is not suited by nature for its construction for that purpose, but it could be utilized for it notwithstanding. At any rate, it would be far less objectionable as a barracks than it is as a hospital.

The saving in time would be of very material benefit to the merchants of the city, and it is through their efforts that legislation in this direction must eventually come. The moneyed interests make the laws and the physicians can only suggest.

Society Reports.

THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY.

MEETING HELD FEBRUARY 6, 1899.

ABSTRACT REPORT.

DR. CULLEN presented the record of a case of "Primary Adeno-Carcinoma of the Appendix," which had been prepared by Dr. Hurdon and which will be published later.

DISCUSSION.

Dr. Kelly: This whole subject is a large one and would require a volume to do it full justice, and I can only outline a few of its important relations. I have been paying close attention to the relation of appendical disease to pelvic diseases for a long time, and the records of our department will show the exact state of the vermiform appendix in every case in which the abdomen has been opened.

We meet with appendical disease in a great variety of relationships. We may have cancerous disease of the appendix, as in this case, where there was an adenocarcinoma, which showed no relationship to the pelvic disease, but, on the other hand, we meet with cases in which the disease is dependent upon the condition of the pelvic organs. I had within forty-eight hours last week five cases in which I had to remove the appendix.

Where the disease depends upon disease of the pelvic organs the appendix may become adherent to the diseased organ, that is, to a uterine fibroid or an ovarian tumor, as is seen quite frequently. Then, again, we meet with a class of cases in which the appendical disease has followed an operation; those are more rare, but quite interesting. After a clean operation in which a diseased tube or ovary has been enucleated the patient within a few months or a year may complain of pain in the right side. The abdomen is opened and the appendix is found adherent to the seat of the former operation. I have had such a case within the past ten days where the appendix was long and adherent to the old wound.

It is important to bear the possibility of this in mind. Always inspect the appendix whenever a laparotomy is performed.

Dr. Ernest Laplace, Philadelphia: "A Demonstration of Intestinal Anastomosis by Means of a New Forceps."

Dr. Laplace stated that the object of this demonstration was to show an instrument for facilitating the operation of anastomosis. Without entering into a consideration of the operations done heretofore for this purpose, all of which have their advantages and disadvantages, it is agreed among surgeons that the ideal operation is that performed by means of sutures—that operation by which the ends of the gut are sutured together, whether we use a continuous, a Lembert or other suture. Any apparatus, any instrument, any contrivance that can facilitate the accomplishment of this operation is, he said, to be studied, and, if it possesses any merit, to be adopted in such cases as require rapidity.

He had been trying for some time to

devise these simple forceps, which consist of only two ordinary hemostatic forceps, bent or curved at the end into a semicircle, so that when the two are placed together they form a complete ring or circle, being held together by a little clasp. These two rings subserve the same purpose as the Murphy button or the Halsted rubber bags or any other support within the gut, and, in addition, no matter what stitch is used these rings can be removed before the last stitch is taken without any difficulty.

Dr. Laplace then demonstrated the manner of suturing the stomach to the intestine, the purpose being to unite the gut to the stomach. Putting the two openings together, he introduced one blade of the forceps into the stomach and the second blade into the intestine and clasped them. The sutures were then readily introduced. When he had sutured the bowels all around, except where the handle of the instrument projected through the wound, he then removed the clamp, which allowed the two halves of the forceps to fall apart, and drew out each half. He then inserted a stitch to close the opening left for the removal of the forceps and the operation was finished. He afterwards made an opening into the stomach and demonstrated that the gut was perfectly patulous.

Dr. Laplace next demonstrated an end-to-end anastomosis. In answer to Dr. Cushing's question, "What would you do if you had to anastomose guts of different caliber?" he said that he would invaginate the two ends, and for that purpose had devised a little instrument for catching the gut at its border and dipping it down into the other before stitching it nearly all the way around and then withdrawing the forceps. This, he believes, meets all the possible indications for operation upon the intestines.

DISCUSSION.

Dr. Halsted: I think that for a lateral anastomosis this instrument promises all that Dr. Laplace claims for it, and we shall certainly give it a trial very soon. It is quicker, much quicker, I should say, than the method we employ. I should think it would be of great assistance, especially for cholecystenterostomies. It

is possible, of course, to do this operation without an instrument, but it is a very difficult one.

Dr. Kelly: "A New Operation for Vesico-Vaginal Fistula."

Dr. Kelly said that the great difficulty in handling certain cases of vesico-vaginal fistulae may be due to two facts. In the first place the fistula may be a very large one, and, in the second place, there may be such an amount of scar tissue surrounding the fistula that its resistance prevents bringing together the parts. A most important finding has been the recognition of the fact that the bladder tissue itself is not often seriously involved in the scar tissue, and the bladder can be drawn down and sutured to itself so as to close the fistula. This is a very important factor in the treatment of certain of these cases that cannot be treated in the classical way.

Dr. Kelly referred to a case that came to him upon which an abdominal hysterectomy had been performed for fibroids. There was a large fistulous opening into the bladder from the vault of the vagina. It was very close to the peritoneum, high up in a virginal vagina; had been operated upon several times and there was an abundance of scar tissue. The edges of the fistula were of such character that he could have no hope of bringing them together and securing union. He opened the abdomen with the intention of exposing the pelvic floor, so that he might dissect the bladder away and sew it up. The patient had a very large ventral hernia, and, unfortunately for the facility of the operation, was very fat. He opened the abdomen, but in attempting to separate the bladder it began to tear, and tore so widely that he saw at once that a successful operation as planned would be impossible. He then cut through the top of the bladder to see if he could get at it from the inside to bring the edges together. He could not do this, and therefore enlarged the opening to draw the parts together, but found this could not be done satisfactorily, and was compelled to follow a novel plan, which succeeded. The bladder was widely opened, in fact split in half; he found the bladder in front of the fistula fairly movable, and made a

horseshoe-shaped denudation around the fistulous opening, excluding it altogether; then, passing catgut sutures, he brought the edges of the denuded arc together. He then introduced a drain through the vagina up into the peritoneum. The patient made an immediate and perfect recovery.

Dr. Kelly then referred to a second case, in which he could not get at the fistula from below. In this case he opened the abdomen, separated the bladder, freed the fistula on both sides and brought the edges together with catgut and closed up the abdomen. The result was a perfect recovery.

DISCUSSION.

Dr. Halsted: In the first case, Dr. Kelly, did you excise the portion of the bladder that contained the fistula?

Dr. Kelly: No.

Dr. Halsted: What became of it?

Dr. Kelly: I left it in the peritoneal cavity, protected by a drain through the vagina.

Dr. Halsted: Does she still have a little fistula?

Dr. Kelly: No, it is completely closed.

Dr. Flexner: "Nodular Tumors of the Pancreas."

Dr. Flexner, after exhibiting the pathological specimens from the pancreas, stated that an enlargement made out during life proved at autopsy to be a tumor closely associated with, but not directly connected with, the liver, but lying directly below and behind the liver, covered by omentum, intestine and a bit of the stomach. It proved to be a tumor which had developed in the pancreas, and was of an unusual nature. The duodenal portion, the head of the pancreas, was still present and very little altered, being quite normal in appearance. In searching for the body of the pancreas, however, nothing could be found to represent it except a band running over the tumor from right to left, which measured four or five millimeters in thickness and showed the lobulations of the pancreas. The tail of the pancreas was probably about its normal length, but not of normal appearance. The tumor, therefore, must have developed in close approximation with the pancreas, and at first it seemed

to have come from behind. There were a number of cysts containing granular material.

He said that on section, however, a different condition was made out. The tumor was found to consist of two nodules, one the size of an orange, and the other the size of a child's head at birth, and these had developed within the substance of the pancreas, occupying the body and a portion of the duodenal end. Although developed within the pancreas, they were separable by capsules, which proved to be also pancreatic tissue, consisting of a series of cysts.

Upon histological examination it was proven that the tumor was an adenocarcinoma, the type being that of the pancreas. There was no doubt, he said, that the tumor had its origin in the pancreas, and yet apparently it was separated from the pancreas. He said he thought it possible that the two masses might have developed from aberrant pancreatic tissue deposited in the pancreas.

Dr. Flexner: "Lymphatic Leukemia."

Dr. Flexner exhibited first a large mass, consisting of the inguinal glands, pelvic glands and retroperitoneal glands, all practically constituting a continuous mass, which had been removed at autopsy. The tumor, he said, consisted of tumor formations that had developed in the glands and run together, because the tissue binding the glands together had been implicated, more especially in the inguinal and pelvic glands. Over the inguinal region, the skin was in part adherent to the enlarged glands, and the subcutaneous tissue was edematous.

Another specimen showed the bronchial, tracheal and cervical glands, all of which were markedly enlarged. Dr. Flexner called attention to the axillary glands, which showed the manner in which the glands were bound closely together over the surface of the tumor. This is an important diagnostic point in the differentiation of leukemia and pseudo-leukemia. Practically all the glands explored were enlarged, the tumor masses being for the most part soft, and on section presenting medullary appearances.

The viscera, Dr. Flexner said, were

free from invasion. There were two small nodules in the spleen, but no considerable metastases. The glands in the neighborhood of the pancreas had also caused invasion of that structure to some extent. In the liver there were no nodules, but some extensive new growth, which followed the blood-vessels.

Dr. Flexner said that the question of interest seemed to be, "What was the disease primarily?" Has it been a case of lymphatic leukemia always, or did it start as a pseudo-leukemia? To his mind, he said, the explanation that seemed most probable was that it was one of the pseudo-leukemia. It presented all the gross anatomical characteristics of that disease.

Dr. Fletcher, in referring to the first case, said he wished to emphasize the fact that the tumor felt in the umbilical region was not clinically believed to have any connection with the liver. The symptoms present during life, he said, should have made one suspect pretty strongly a pancreatic tumor, for the patient presented all the symptoms that are supposed to be characteristic of such a tumor—persistent jaundice, an enlarged gall-bladder and nausea, vomiting and clay-colored stools of a greasy character.

Referring to the second case, he said that from the first the glands did not present altogether the picture of lymphatic leukemia. The blood count, he said, showed characteristic features of lymphatic leukemia, but the symptoms, as a whole, suggested the presence of pseudo-leukemia.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

MEETING HELD JANUARY 24, 1899.

DR. E. C. LEVY, president, in the chair; Dr. Mark W. Peyser, secretary and reporter.

Dr. A. M. Phelps of New York read a paper on "Lateral Curvature of the Spine and Pott's Disease" (see page).

Dr. Stuart McGuire said that he had listened with interest and profit to Dr. Phelps' admirable discussion; that the subject of Pott's disease was one of peculiar interest to him, as he had been the victim of the disease during childhood; that he had been a patient of Dr. Lewis

Sayre; that he had been the subject of many experiments, and that he believed he was the original case upon whom the plaster of Paris jacket was applied; that although twenty-five years had elapsed he could remember how Dr. Sayre placed him face downward across his knees and by separating his legs and producing extension thus relieved pain and reduced deformity. This was the inception of a principle now carried out by suspension. That he remembered how Dr. Sayre placed his broad hands on either side of the spinal column and, by gentle pressure, maintained the correction secured and gave support and immobilization to the back. This was the inception of the principle now carried out by the plaster cast. Dr. McGuire said that the first attempt at the practical application of the brace consisted in laying him upon a table and producing extension by manual traction on his head and feet and then the application of alternate layers of squares of flannel and wet plaster to his back. This formed a "turtle shell," which was held in place by circular turns of a cotton bandage. Dr. McGuire then outlined the evolution of the plaster jacket, and spoke of its advantages—cheapness and effectiveness, and of its disadvantages—short life and lack of cleanliness.

In regard to the aluminum corset invented by Dr. Phelps he said that it was a perfect substitute for the plaster brace, combining all of its virtues and having none of its vices; that unfortunately, owing to its cost, it would never be widely adopted, but for the well-to-do it was a luxury which should not be lost sight of.

In conclusion, Dr. McGuire spoke of the muscular atrophy and diminished chest expansion which resulted from the long use of any brace, and of the advisability of taking them off as soon as they could safely be discarded. He asked Dr. Phelps what were the evidences of cure of Pott's disease and what was his rule as to the length of time a brace should be worn.

Dr. J. A. Hodges said he would be glad if Dr. Phelps told the ultimate results of lateral curvature and Pott's disease on respiration, and also the forms of paralysis in patients left untreated. It was sur-

prising that there was not more paralysis resulting from destruction of the vertebrae and from pressure on and degeneration of the spinal nerves.

Dr. George Ross reported the following case: A theological student went coasting the hillside and caught cold. He was unconscious of having sustained an injury, and yet in a few days he found himself unable to walk up the steps. His feet were leaden. He was placed in the hospital of the school, where he remained for six weeks. No improvement following the treatment advised, he was sent to a hospital in Baltimore. Paraplegia with myelitis was diagnosed, and a fatal prognosis made. Two months of observation failed to warrant a change of opinion and the patient was sent home to die. Being the family physician, *Dr. Ross* was summoned to see the patient, and found him with thighs flexed on the abdomen, knees close under his chin, limbs in spastic rigidity, emunctories paralyzed and pains excruciating. The history furnished seemed to warrant the conclusion that the case was one of acute ascending myelitis, with paralysis from pressure. Months rolled by without material change other than the advent of girdle pains of the abdomen and chest and harassing bronchial cough, with difficult asthmatic breathing and repeated threatenings of impending suffocation. Then there appeared a swelling near the cervico-dorsal vertebral junction and a culminating abscess, which was lanced. It was long in healing, and, though naturally to be looked for, there is no record of necrosing bone escaping from its cavity! The presence of this abscess proved clearly to his mind that the case was one of Pott's disease of the upper dorsal vertebrae. No mechanical appliance was at any time used, and the reliance for treatment rested solely on spinal counter-irritants, constitutional reconstructives and supportives and an intelligent dietary. The surprising outcome of the case is that today, though deformed by a posterior upper dorsal curvature, the patient is healthy and vigorous, and, while engaged in no special work, is quite competent to do many things.

Dr. Phelps said, in closing the discus-

sion, that the mode of manufacturing the aluminum corset was to extend the patient and apply the bandages so as to make a plaster cast. This was cut off, stuffed with oakum and plaster of Paris, after which shellac was applied to the stuffing. Sheets of the softest aluminum were laid on the mold and shaped with a wooden hammer. It was then coated inside and out with white shellac and alcohol to prevent the action of perspiration. He said he had hope that as time progressed the apparatus could be made and sold at a lower price.

How aptly *Dr. McGuire* tells of *Dr. Sayre*! The orthopedic hand is the best brace made; it can mold the corset to fit, and is in partnership with all the ideas conducive to best results.

The indications of cure are the same as those of hip-joint disease. Here I never remove the brace until the limit of movement is increased, and so I do in Pott's disease, which is never cured in less than three years.

Atrophy is always produced by degeneration of the nervous end plates in the muscles. Braces do not produce atrophy. If a brace gives room in front there is no interference with the play of the chest.

The wire corset does not support as it should. Patients using it are two inches taller when placed in a plaster corset. The aluminum cast fits the patient like a French corset.

A complete cure cannot be produced in lateral curvature, because the ribs overlap, the intercostal muscles are shortened and the spaces obliterated. The ribs cannot be separated except by means of the knife, and if this is used the patient dies.

Concerning paralysis, I will venture to say that from 15 to 20 per cent. of patients afflicted with Pott's disease manifest it at some stage, it varying from involvement of groups of muscles to total paralysis. Of the estimated 20 per cent. 95 per cent. will recover without operation from the complication; the remainder will not. It is not always due to bending; sometimes it is from involvement of the canal, producing thickening and pressure myelitis. In some cases I have seen tubercular meningitis; in

others penetration of an abscess. My observation is that those cases attended by bladder and rectal incontinence never recover, but I have seen recovery where these organs were only irritated.

Dr. Ross' case was one of osteo-myelitis recovering without treatment, but this should not be an argument against treatment.

Correspondence.

IMPORTANCE OF VACCINATION.

BALTIMORE, February 11, 1899.

Editor of the Maryland Medical Journal:

DEAR SIR—The editorial on vaccination in your issue of week before last is most timely. Last May, in view of the presence of smallpox in the States contiguous to Maryland, and recognizing the increased danger of invasion by smallpox in time of war, the State Board of Health began to urge upon local boards of health and upon school boards the importance of thorough vaccination. The response to this agitation was fairly encouraging and has increased very rapidly since the anticipated spread of smallpox occurred.

The school-children in all parts of Maryland are probably better vaccinated now than at any previous time in the history of the State. Not only have a larger number of children presented certificates of vaccination and revaccination, but the certificates of vaccination guarantee better protection. Taking advantage of a loose interpretation of the law, many physicians have hitherto been in the habit of certifying at the time of operation. A form of certificate has been prepared by the State Board of Health and adopted by many of the school boards which requires a statement of the result of vaccination. This has undoubtedly brought about a greater degree of immunity. Below is a copy of the certificate:

CERTIFICATE OF VACCINATION.

Public School No.... District No....
County.....

This certifies that on.....I vaccinated.....with lymph obtained from.....and that on.....

a typical vaccine vesicle, scab, or scar was present at the site of operation.

Signed.....M.D.

Address.....

On the opposite side of this certificate is the following:

"Teachers should carefully preserve all vaccination certificates. Those which do not report the presence of a 'typical vaccine vesicle, scab or scar at the site of operation' admit a child to but one year's attendance at school. At the beginning of another term revaccination should be done.

"Successful vaccination, duly certified, admits a child throughout school life."

Meanwhile, what is being done by the physicians to bring about a general vaccination of adults? Very little, I fear. The necessity of revaccination is not at all appreciated by the general public, and an excellent opportunity is present to impress this lesson on the popular mind. If medical men would inquire whether the families which they attend are prepared to resist an invasion of smallpox they would usually be met with the inquiry, "What is a necessary defense against smallpox?" and from this point the way is easy to revaccination. A general vaccination would undoubtedly materially increase the earnings of the physicians in this State for the year, but I do not believe that people would ascribe to the profession interested motives in advising vaccination. On the contrary, the vast majority of intelligent people rest entire confidence in the family doctor. Certainly if smallpox should be as prevalent in Maryland as it has recently been in Pennsylvania, Ohio or Virginia the earnings of the profession would be far greater, though less distributed, than if a general vaccination should occur.

The danger of serious outbreak of smallpox, already great enough, is not diminishing. Few things could be more unfortunate than for the profession to create a popular alarm, but nothing could so surely defend the State as to be thoroughly prepared. In a well-vaccinated community an epidemic of smallpox is impossible.

Yours, very truly,

JOHN S. FULTON, M.D.,

Sec'y State Board of Health of Maryland.

Medical Progress.

PERFORATING TYPHOID ULCER.—If many typhoid cases die it is interesting to know what the final cause of death is. Dr. Harvey W. Cushing, resident surgeon at the Johns Hopkins Hospital, reports in the Johns Hopkins Hospital Bulletin four recent cases of laparotomy for perforating typhoid ulcer, with recovery. He finds that surgical intervention in these cases is often the only hope for recovery, and the results of his four cases rather support his premises. From his work he concludes as follows:

"The diagnosis of intestinal perforation in typhoid fever may present many difficulties. No abdominal symptoms, either subjective or objective, occurring in the course of the fever should be regarded as trivial, and a sudden change of any sort in the patient's condition should lead first of all to the suspicion of this most serious complication. A distinction should be drawn between the two varieties of perforation, the appendicular and those occurring in the free bowel, as their symptoms, course and prognosis vary considerably. Many cases, however, even those of perforation from the free bowel, present what may be recognized as a pre-perforative stage, which in some cases calls for a laparotomy in anticipation of a complete perforation with extravasation. The presence of leucocytosis is not an infallible sign of perforation, as it may disappear with the onset of general peritonitis. It is most valuable in this anticipatory stage.

"When the diagnosis is made operation is indicated, whatever the condition of the patient. As Abbe's case exemplifies, no case may be too late. A precocious exploration from an error in diagnosis is not followed by untoward consequences such as must invariably be expected after a neglected and tardy one.

"Our present knowledge amply corroborates the statement of Miculicz made at Madgeburg in 1884: 'If suspicious of a perforation one should not wait for an exact diagnosis and for peritonitis to reach a pronounced degree, but, on the

contrary, one should immediately proceed to an exploratory operation, which in any case is free from danger.'"

* * *

DRUG HABITUÉS.—It is no easy matter to break some persons of drug tipping. Dr. J. M. French draws in Medicine some practical conclusions in the treatment of such drug patients. His experience convinces him that in all cases of any considerable standing the disease to be treated includes much more than the habit of drug-taking, and the breaking up of the habit is not the cure of the disease. There are three stages in this. One is the stopping of the drug-taking, then the overcoming of the drug-craving and last of all the removal of the drug effects. No cases can be treated outside of a hospital or sanitarium. The drinker or the drug-taker needs constant companionship, sympathy and encouragement, and withal he must be ruled with an iron hand. When liquor is withdrawn from such a case strychnia is used to tone up the system. It should be given both hypodermically and by the mouth, and to the extent of one-fifth to one-fourth of a grain a day. Drugs affecting the liver, kidneys and bowels should also be used. When opium or morphia is withdrawn from an habitué such soothing remedies as the bromides, with other sedatives and hypnotics, are indicated. A strong will power is necessary to effect a cure, and the higher the social and mental scale of the patient the less the liability to a relapse.

* * *

DANGERS OF OVARIAN CYSTOMA IN PREGNANCY.—Schwarz (British Medical Journal) reports that a woman with a dermoid cyst was taken with labor pains at the sixth month, but as the tumor was impacted in the pelvis and could not be reduced, and flooding had set in, the fetus was extracted. During version the cyst burst and the patient died on the third day of peritonitis. Tenesváry observed that the result once more impresses upon us the necessity of ovariectomy in such a case, delivery to be effected afterwards.

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Medical + Journal.
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MARYLAND MEDICAL JOURNAL,

Fidelity Building, Charles and Lexington Streets,
 BALTIMORE, MD.

WASHINGTON OFFICE:

Washington Loan and Trust Company Building.

BALTIMORE, FEBRUARY 18, 1899.

It is admitted that the price of an aniline derivative, used medicinally, in this country, compared with its cost

**Home and Foreign
 Products.**

in the markets of Europe, or even in Canada, is a question of

simple economics to be discussed together with tariff, revenue and, perhaps, reciprocity. But the question: "Do the conditions created and controlled by our present patent and trade-mark laws, as they relate to medicinal products, conduce to higher ethical standards or insure more earnest scientific research?" must be considered by the profession and the science of medicine as it relates to these divisions, respectively. No inherent or assumed responsibility touching this much-discussed matter should be shirked or slighted.

The broad, positive statement may be made that in no other country of equal enlightenment is a medicinal or food product patentable, and in no other country, until very lately, could the common trade name of an article become private property. It naturally follows, therefore, that in no other country is there a possibility of the profession of medicine prescribing "patented" and "proprietary" medicines, nor does it occur elsewhere that students in pharmaceutical chemistry cannot vie with each other in originating new processes for

producing a well-defined chemical. It is undoubtedly true that physicians are daily prescribing patented and trade-marked (proprietary) medicines and that scientific research, looking toward the production of synthetic remedies, is scarcely apparent in this country. Why is this so? Certainly the distaste for unethical practices is well marked in the personnel of the medical profession here, and the United States boasts of an abundance of raw material, plenty of capital, unequalled universities, and will not own to less talent or application.

Patented and proprietary medicines are prescribed, because they have been created and maintained by our patent laws and a misconception of our trade-mark laws. Scientific men are denied all encouragement, because they are effectually prohibited from using any new, profitable processes they may discover. No matter what our individual ideas of property and justice may be we must submit to facts, and the conditions conclusively show that there is but one interest conserved by these laws, and that is not the elevation of medicine nor the advancement of science—at home.

* * *

THE extreme cold weather and heavy snows have had their effect on all callings, and especially has it been severe

The Cold Weather. on the physician, who must be out in all weathers and often at night. The severest time will be when the snow begins to melt and the air has that treacherous feeling midway between spring and winter. Medical societies and medical schools have suffered and all such work came to a standstill for a few days. If extreme cold can freeze organisms, then Baltimore and its vicinity must be in a very healthy and sterile condition, and it is likely that many contagious diseases have been frozen out by the cold.

* * *

ATTENTION was called last week to the importance of vaccination at this time, and in this issue there is a very strong **Vaccination.** letter from Dr. John S. Fulton, secretary of the State Board of Health, urging on physicians the same thing. Also it is noted, as a piece of news, that Health Commissioner Jones has appointed a large number of extra vaccine physicians to see that the city is thoroughly protected. This subject is so important that it must be impressed on the profession.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending February 11, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	1	..
La Grippe.....	..	10
Pneumonia.....	..	35
Phthisis Pulmonalis.....	1	15
Measles.....	23	..
Whooping Cough.....	1	..
Pseudo-Membranous Croup and Diphtheria. }	29	5
Mumps.....	..	..
Scarlet Fever.....	7	2
Varioloid.....	..	..
Varicella.....	8	..
Typhoid Fever.....	3	2

Christian Scientists will soon erect a temple in Baltimore.

New York is to have a law regulating the sale of poisons.

Ohio University has decided to create a medical department.

Behring has made an application for a patent for a serum to cure consumption.

Dr. James Etheridge, the gynecologist of Rush Medical College at Chicago, is dead.

The American Neurological Association will hold its next meeting at Atlantic City in June.

The Ninth International Congress of Ophthalmology will be held in Utrecht, in August.

Missouri, Michigan and Illinois are all seeking laws to regulate the practice of medicine.

Dr. G. T. Simonson of Crisfield has been appointed vaccine physician for Somerset county.

The Jenner Society has sent congratulations to Mr. Rider Haggard on his novel, "Dr. Thorne."

The *Medical Times and Register* of Philadelphia now appears as a monthly, with an increase in the number of pages.

Dr. H. V. Wurdemann of Milwaukee has succeeded Dr. Casey Wood as editor of the *Annals of Ophthalmology*.

The Meharry Medical College of Nashville, a school for colored men alone, held its twenty-third anniversary recently.

At the annual meeting of the Lancaster (Pa.) City and County Medical Society officers were elected for the ensuing year.

Japan has compulsory vaccination and re-vaccination every five years, and only aseptically prepared calf lymph is used.

The German Congress of Internal Medicine will be held at Carlsbad in April under the presidency of Professor H. Quincke.

Messrs. E. B. Treat & Co. have bought the *International Medical Magazine*, but Dr. Boardman Reed will still continue to edit it.

Dr. Paul F. Mundé has been made the honorary president of the International Congress of Gynecology and Obstetrics to be held at Amsterdam in August.

The *Atlanta Medical and Surgical Journal* has been made the official organ of the Atlanta Society of Medicine. It is an attractive and well-edited monthly journal.

The Seventh International Congress Against the Abuse of Alcoholic Liquors will be held in Paris in April. Dr. T. D. Crothers of Hartford will represent this country.

Menelek, the Emperor of Abyssinia, is said to be greatly interested in medicine, and it is reported that he will read a paper on vaccination at the International Medical Congress at Paris next year.

Until an editor has been elected to succeed the late Dr. John B. Hamilton, Dr. Truman W. Miller, the chairman of the editorial committee, will edit the *Journal of the American Medical Association*.

Dr. Robert C. Stewart, a prominent physician of Shippensburg, Pa., was accidentally asphyxiated by illuminating gas at his home. Dr. Stewart was a graduate of the University of Pennsylvania in 1872.

Health Commissioner Jones of Baltimore has appointed the following additional vaccine physicians: Drs. W. Clyde Burns, Clendinen Teal, W. F. Pentz, J. L. Winner, M. C. Robins, W. G. Townsend, W. S. Kirk, M. L. Todd, Henry Nice, J. H. Ullrich, C. W. Didenhover, Robert S. Page, L. C. Stitely, A. B. Giles, E. A. Munoz, Wm. B. Hawkins, Charles L. Ney, Joseph Hart, J. H. Groshaus, Joseph L. Spruill, Joseph E. Muse, J. W. Lubchansky, C. G. Keefer, William Grant, H. C. Knapp, A. D. Atkinson, Wm. J. Pillsbury, Gilman Evans, Richard M. Johnston, A. McG. Belt.

Washington Notes.

A few more cases of smallpox are added to the list.

Acting Assistant Surgeon H. R. Carter, now in this city, is ordered to Atlanta, Ga.

Acting Assistant Surgeon Chas. R. Gill, U. S. A., has been ordered from Brooklyn to Havana for assignment of duty.

At the Medical Society Wednesday evening Dr. E. L. Munson, U. S. A., read a paper upon "Lay Suggestions on Medico Military Affairs."

The death rate for the past week was 20.41 for each thousand of the whole population. There were five deaths from diphtheria and one each from typhoid fever, measles and scarlet fever. There are ninety-three cases of diphtheria and 144 cases of scarlet fever under treatment.

At the regular meeting of the Therapeutic Society Saturday evening papers were read by Dr. Benjamin G. Bool, subject, "Treatment of Eclampsia," and Dr. L. Kolipinski reported cases—1, foreign body in the stomach expelled by vomiting; 2, arrest of hiccup by depressing the tongue.

Health Officer Woodward is engaged in investigating the circumstances attending the death of the two children of Wm. G. Crable, who died of diphtheria and under Christian Science treatment. He will endeavor to sustain a charge against any of the parties concerned of practicing medicine without a license and of failing to report the cases as diphtheria, as required by law.

Book Reviews.

TEXT-BOOK OF MECHANOTHERAPY (Massage and Medical Gymnastics). For Use of Medical Students and Trained Nurses. By Axel V. Grafstrom, M.D., late House Physician, City Hospital, Blackwell's Island, New York. Philadelphia: W. B. Saunders, 1899. Pp. 139. Price \$1.00 net.

After Kleen's masterly work (translated by Hartwell), Posse's "Medical Gymnastics" and Dr. Kellogg's "Art of Massage" this little book seems rather unnecessary, except as a remembrancer in connection with lectures for nurses and medical students.

There is a lack of clearness and completeness

in describing the positions taken by the operator and the different manipulations, as on page 59, "Kneading," and on page 69, "Pressure."

There is also some confusion in the use of terms, as in speaking of "abduction and adduction of head and trunk," pp. 27 and 49.

Why add "dorsal massage" to palmar, digital and ulnar methods of manipulation, as recognized by Taylor, Kleen and Posse?

Eleven pen-and-ink sketches accompany the text.

It is a difficult task to teach a mechanical art in books, and there is always danger of adding to the ranks of the unskilled laborer by incomplete instruction. The author is a late lieutenant in the Royal Swedish army, and has been a contributor to various journals.

The *Psychiatrist*. Published quarterly. Price \$2. This is the organ of the Illinois Eastern Hospital for the Insane and is edited by the staff of that hospital. The first number is well printed and illustrated.

Western Clinical Recorder is a new monthly published at Chicago, and is conducted by Drs. Fred Jenner Hodges and William T. Rinehart. It is a very pretentious journal and contains much excellent matter and is well printed. The cover is very unique.

The *Southern Medical Journal* is a new monthly journal published at La Grange, N. C., with Dr. J. W. P. Smithwick as editor. The opening article is by Dr. Randolph Winslow of Baltimore. It is rather unfortunate to issue a journal hurriedly, but the editor promises a better number next time.

The *Memphis Lancet*. This is a new monthly published at Memphis at \$1 a year, and has a large corps of editors. It starts off well, with an article by Dr. W. L. Estes on "Surgical Shock." Other articles are by Dr. Charles W. Burr, H. A. Hare and many other well-known men. It promises to be very successful.

The *St. Paul Medical Journal*. This is a monthly published and edited by the Rumsey County Medical Society. It is more like the larger and more serious monthlies than most of its contemporaries. While it is not specially well printed, it is an able journal and will be a formidable rival to *Medicine*, published in Chicago. Dr. Burnside Foster is the editor, and there is a large force of collaborators. It is \$2.50 a year.

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A CASE OF MULTIPLE OSTEO-MYELITIS.

By *S. J. Windsor, A.M., M.D.*,

Dames Quarter, Md.

As it did not occur to me for the first few weeks of this case that it might present so many points of interest, and as I only saw it at long intervals after this time, but few notes were taken, and I am, therefore, compelled to report it for the most part from memory. This is, to my mind, an extremely interesting case, and I regret that I cannot give its clinical course in detail. However, I have watched it as closely as I could and have tried to keep some of the most interesting points as clearly as possible in mind, as I have intended almost from the first to report it at some time.

It was in July, 1893, that I was called to see Raymond B., an intelligent youth, aged fourteen years, and found him with temperature high and pulse rapid. He had diarrhea, and had had a chill the night before. He complained of pain just below the left knee, and I noticed a furuncle on the left arm. But little attention was paid to the leg or arm at this time. He said he had not been feeling well for more than a week, and the description he gave of his symptoms for this time was very much in accord with the prodromic stage of typhoid fever. I made a diagnosis of typhoid fever, with malarious complication—the so-called typho-malarial fever of some authors—and instituted treatment accordingly.

On the following day I found him with temperature and pulse about as at my previous visit, diarrhea unchecked, pain

in the leg persisting and much tenderness at the seat of pain. He also complained of pain at the left shoulder. It now looked to me as if the case was one of rheumatism, or there was, at least, a rheumatic complication, and anti-rheumatic remedies were added to the treatment.

I made my next visit on the following day and found his condition no better. The treatment of the previous day was ordered to be continued. At this time I was attacked with remittent fever, and did not see him again for more than a week. In the meantime he was not seen by any physician. The nearest physician living at a considerable distance, and being very busy at the time, the young man's parents relied on having me send him treatment until I could return to the case. When I returned to the case his condition was indeed critical. There was an immense abscess just below the left knee, an abscess in the left clavicular region, and he was in a typhoid condition. It was now evident to my mind I had a case of osteomyelitis of the tibia and clavicle to deal with, and so notified the family. At the same time I gave a very unfavorable prognosis. I was not allowed to open the abscesses.

Upon seeking the cause of this attack I learned that about two years previous to this time he fell from the top of a load of fodder to the ground, a distance of about six feet. I also learned that about two weeks prior to the beginning of this attack he went in bathing about midday immediately after coming out of the field from plowing and while perspiring freely, and that as soon as he plunged into the water he became cramped in his lower extremities and had not felt well since. His health was good until this attack. He suffered from scarlet fever and measles

when quite young, but made a good recovery in both instances. He has a younger brother who has always had good health. His maternal relatives are free from any dyscrasia so far as I am able to learn, but not so with his paternity. One paternal uncle, who died of cancer a short time since, had an attack of osteomyelitis in his youth; an aunt is afflicted with cancer, and other uncles and aunts show evidences of a scrofulous diathesis.

I continued in attendance upon the case about two weeks from the time I returned to it, when I was dismissed. Spontaneous opening of the leg abscess occurred before I was dismissed, but the abscess in the clavicular region was left unopened. As soon as the abscess of the leg opened there was an amelioration of his symptoms. His fever now ran a more moderate course, the pulse became less rapid, diarrhea subsided and he gradually emerged from the typhoid condition in which he had been for two or three weeks.

About two months after my dismissal I was called in to open the abscess in the clavicular region. This abscess was now quite large. The disease was now extending down the tibia and several sinuses had opened. Cod-liver oil was prescribed.

I saw the case a few times in the next twelve months, and at the expiration of this time the whole tibia had become affected and several sequestra had been cast off; the knee and ankle joints had become involved and both were completely ankylosed, with the knee flexed at an angle of about 120° and the foot extended; the whole clavicle had become necrosed and had been cast off almost entire, and a new clavicle had formed; several small pieces of bone had exfoliated from the inferior maxillary bone and passed through the soft parts just under the tongue, and a small piece of bone had exfoliated from the right astragalus.

There was also false ankylosis of the right hip and knee joints, probably the result of catarrhal synovitis, with the knee flexed at a right angle and the thigh flexed at an obtuse angle. He was extremely emaciated and cachectic. At no

time did I find him with temperature below 101° F. or pulse below 115, until after the necrosed clavicle had been cast off in August, 1894, when his temperature fell a degree or so and his pulse was reduced to within the neighborhood of 100.

After the subsidence of the trouble at the shoulder the leg was apparently the only diseased part remaining, and I advised amputation at the thigh. His mother took him, in September of the same year, to the Johns Hopkins Hospital to have done for him whatever might there be thought best. It was decided at the hospital that amputation was the proper thing to be done, and he was put upon treatment to build him up for the ordeal. But, after a short stay at the hospital, he became dissatisfied and returned home without having the operation performed.

I saw him several times in the next twelve months, and his condition continued about as when he left the hospital, the tibia still suppurating and many new sinuses opening. Several pieces of bone were exfoliated.

When he returned from the hospital I think he and his parents had abandoned all idea of having the thigh amputated, but by insisting that amputation was probably necessary to prevent fatal exhaustion, and that if he could recover without the operation this member would be useless, I finally got the consent of all concerned to operate. On Thanksgiving day, 1895, with the assistance of Drs. Monmonier, Rowe and J. Zachary Taylor, I amputated the thigh at the middle third. The operation was done under strict antiseptic precautions, and the wound healed beautifully.

The scene now seemed to change for the better. After having been bedridden for more than two years, with suppuration going on as already described, he was in a short time after the operation free from any point of suppuration, clear of fever and able to sit up in a chair. He put on flesh rapidly and continued to improve for about nine months. During this time he was able to sit up most of the day and was out in the open air much of the time, being taken out driving often by different members of the family and

rolled about in an invalid chair by his younger brother. The wasted and contracted muscles of the right lower limb were treated with passive motion, cod-liver oil and massage, and under this treatment, though imperfectly carried out, the muscles improved and the hip and knee joints became to some extent relaxed.

All went well, and I thought the young man was getting along splendidly and would soon be ready for an artificial limb, until August, 1896, when he was again attacked. This time the right femur and tibia were affected. There was a circumscribed abscess in each of these bones. A small piece of bone was exfoliated from the tibia, but none from the femur. Healing soon took place at both points. His general condition did not seem to suffer much from this attack, but it showed that the disease was not spent, and was a warning that an attack of more gravity might at any time appear. In November of the same year the right humerus became involved. No bone was exfoliated, and suppuration at this point was of short duration. This attack was complicated with synovitis of the elbow joint, and the muscles of this member became atrophied and the joint contracted.

After the subsidence of this attack his case again seemed to take a more favorable turn and improvement went on until the summer of 1897. In the early part of this summer the second right rib and right ilium were affected. The rib was only slightly involved, but an abscess over the ilium was quite large and very painful. There was no necrosis of either bone and the abscesses soon healed. But a little later in the same summer the bone of the stump became affected and an immense abscess formed. This came very near closing the scene, and he was prevented from sinking only by free stimulation. This abscess opened spontaneously at the right side of the anus. I was present at the time, and I am sure one gallon of pus was at once discharged. Healing soon ensued without any exfoliation of bone, and he again mended rapidly.

His condition during the winter of 1897 was about as good as during the previous winter. Now noticing that he

got along fairly well in winter and that the attacks returned in hot weather, and thinking that he might escape these recurrent attacks by spending his summers in a cooler climate, I ordered him North to spend last summer. On the 6th of June his mother left with him to visit friends in Troy, N. Y., where they remained until the 1st of August.

While in Troy he improved wonderfully, and returned home apparently better than since he was first attacked. But he returned a little too early, and in August the sternum, upper part of the right humerus and bone of the stump began to suppurate. Healing has taken place at the sternum and humerus without any loss of bone, but the stump still gives him considerable trouble and a few sinuses have opened. There is also at this time tenderness of the first right rib and lower part of the right humerus.

The knee is still a little contracted, owing to shortening of the hamstring muscles, and he cannot quite extend the thigh. The right arm is a little smaller than the left, and the elbow joint still contracted a little. However, his general health is tolerably good, and he is nearly as stout as he ever was.

The cause of this young man's trouble is a question of extreme interest. There is the history of a fall, and this has been accepted as the cause by most of the physicians whom he has consulted; but I am not so sure of this. Professor Senn of Chicago attributes to cold an important rôle as an exciting cause of the so-called spontaneous variety of osteomyelitis, and in his "Principles of Surgery," 1891, writing of the etiology of osteomyelitis, p. 236, says: "I have repeatedly observed cases of osteomyelitis in boys who, after active exercise, suddenly became chilled by bathing in cold water, or who, after an exciting game of baseball, stretched themselves out on the cold ground to rest."

But Professor Senn does not claim that exposure to cold alone could ever result in an attack of osteomyelitis. He holds that the essential exciting cause is the presence of one or more varieties of pus microbes. I believe this young man's attack was precipitated by the disturb-

ance of the equilibrium of the circulation, caused by his becoming suddenly chilled by bathing immediately after active exercise, his system being already infected with the essential cause and an hereditary predisposition to this disease probably existing.

I cannot believe that the pathological condition which prepared the soil for the action of pus microbes or their ptomaines was in this case an injury. The fall he got was about two years prior to the beginning of this attack, and he never complained of being hurt. I do not wish to be understood to doubt that an injury does very often stand in etiological relation to this disease, but I do believe there are other causes apart from an injury capable of setting up the disease.

When an attack of osteomyelitis develops, and it is believed that an injury is necessarily the cause of it, it is generally easy for the patient or parents to recall a time when the former was hurt.

There are very few young persons that do not get hurt to a greater or less extent at some time, and a person in whom osteomyelitis develops may have received such a trivial injury that it would never be thought of by patient or parents if not made to believe that an injury is necessarily the cause of the attack. I am aware I have been criticised by some members of the profession for maintaining that this young man's attack was caused by his suddenly becoming chilled by bathing just after active exercise, but I still hold to the same opinion.

The manner of infection in these cases is another extremely interesting subject. It is held by leading surgeons that infection usually takes place through a wound or abrasion of the skin, but sometimes through the intestinal canal or respiratory organs, and in one case Kraske traced the infection distinctly to a furuncle of the lips.

Infection through the intestinal canal would be expected to give rise to diarrhea as a premonitory symptom, and diarrhea was one of the premonitory symptoms in this case, yet I do not believe the intestinal canal was the seat of invasion. Every recurrence of the disease has been attended with diarrhea, and these recur-

rent attacks were probably due to microbes that after the first attack had remained latent in the tissues until conditions were created which enabled them to display their pathogenic properties, and not to a new infection. Anyway, in most instances localized points of tenderness in the osseous system preceded the diarrhea by several days, showing that infection had already taken place when the diarrhea appeared, and that diarrhea was only an accompanying symptom, due perhaps to an effort of nature to eliminate the pathogenic micro-organisms through the intestinal canal.

I believe the diarrhea attending the first attack was, as in the recurrent attacks, only an accompanying symptom, and that the furuncle seen on his arm at my first visit was the source of infection. This furuncle made its appearance about the time he went in bathing, which, as before stated, was about two weeks before I saw him, and while he did not feel well for these two weeks, showing that the disease must have been forming, diarrhea had made its appearance only a day or so before my first visit.

Another interesting point in this connection is the fact that this disease is arrested in cold weather and reasserts itself as the hot season comes on. It seems while the microbes can inhabit his system without any deleterious effect in cold weather, the depression of his system, caused by a continuous high temperature, is sufficient to prepare the soil for their pathogenic action, the cachexia resulting from the first attack greatly predisposing him to the disease. He says that while he was in Troy the days were very hot, but the nights were cool and bracing. There was a much greater fall in the temperature at night than is the rule here. This variation of temperature gave his system a chance to react in every twenty-four hours and probably explains why he did so well in Troy.

According to the description of osteomyelitis given in the text-books, I think this is a typical case, and to a physician who had seen the disease before an early and correct diagnosis should have been easy. My only excuse for not arriving at a correct diagnosis at my first few visits

is that this case happened in the first years of my practice and was the first case of the kind that had come under my observation. I think that pain in one or more bones, especially if near the epiphyseal line of long bones, with tenderness at the seat of pain and without redness or swelling for a few days, attended with fever following an initial chill, and resembling typhoid fever, occurring in a child or young adult, would justify a diagnosis of osteomyelitis.

Pain and tenderness at the seat of disease were early symptoms in this case. There was absence of swelling and discoloration of the skin for the first few days. The fever resembled typhoid fever, but I noticed the temperature showed less variation than is the rule in the latter affection. But, according to the best authorities, a large percentage of cases do not run such a regular course, and mistakes in the early diagnosis of this disease are not infrequent, even in the practice of experienced surgeons. In fact, Professor Senn is authority for the statement that Mr. Holmes has said that acute suppurative osteomyelitis is more frequently recognized at post-mortem examinations than at the bedside of the sick.

It is hard to predict what will be the ultimate result of this case, but it looks to me as if he would recover. His general health is fair, he is developing into manhood, and the disease is, so to speak, wearing itself out. The right hip and knee joints are gradually relaxing, and I think before a great while he will be able to straighten the limb without having to undergo an operation.

One of the most interesting points in the case is the formation of a new clavicle. The new clavicle is a little irregular in outline, broader than its fellow of the opposite side and more than an inch shorter. It appears shorter than when it was first formed, but I think this is only relative and not actual, the rest of the osseous system having grown, while this bone has remained at or near its original length. There is complete ankylosis of the sternal and acromial articulations.

Professor Wyeth, New York, in his "Text-Book on Surgery," 1893, p. 522, records a case of his own, in which a new

clavicle was formed after subperiosteal excision of a necrosed clavicle, but such an event must be of extremely rare occurrence. In the case I report the vitality of at least a part of the periosteum of the clavicle must have been retained.

While the treatment of these cases is mainly surgical, and very little surgical interference was allowed in this case until the thigh was amputated, I believe the disease was modified and a fatal issue probably averted by the treatment he received in the beginning.

UNDER-AVERAGE RISKS IN LIFE INSURANCE.

By Charles C. Bombaugh, M.D.

Baltimore.

THE growth of the life insurance system in the United States is without parallel in the history of financial institutions. The charters of the oldest of our life companies date but little beyond half a century, yet within that comparatively brief period they have attained a degree of development, a breadth of operation and a measure of systematic provision for dependents which place them in the front rank of the marvels of the nineteenth century. Within that period they paid to beneficiaries more than \$1,500,000,000 and accumulated \$1,000,000,000 more toward the fulfillment of contracts in force. The tireless energy, the persistent activity, with which their claims have been pressed upon public attention, and the extent of responsiveness and acceptance on the part of all classes may be regarded as one of the most potent forces of modern civilization.

But while these great organizations have become the custodians and investors of hundreds of millions, British corporations of thrice their age, handicapped by pertinacious adherence to time-worn traditions, have been plodding along at a stage-coach pace, content with limitations which broadly contrast with the vigorous methods and the adventurous spirit of American executive officers and agents. They still hedge their contracts with the restrictions and warranties of antiquated policy forms, and are reluctant

to adopt the liberal concessions of our companies—non-forfeiture provisions, incontestability except for fraud, guaranteed surrender values, and modification or removal of burdensome stipulations.

In one material respect, however, the British life offices, home and colonial, have shown that they are more in line with the teachings of experience and the demands of the present age than their *confrères* in America or on the Continent of Europe. With us there are but two classes of applicants for insurance—eligibles and non-eligibles, the qualified and the disqualified. In England there is a class between these extremes, the under-average or substandard class, which the companies consider entitled to protection and for which they make provision by a compensating addition to the tabular premium rate. Our American companies, with few exceptions, charge extra rates for extra risks, not for hereditary or acquired infirmities, but for exposure, as, for example, military risks in active campaigns, females during the child-bearing period, locomotive engineers and mail, baggage and express agents on railroads, and travel or residence in tropical climates. There are also cases in which there is a lack of robustness or a history of degenerative changes in the family, and cases in which the individual manifests certain inherited susceptibilities or influences which may shorten the duration of life. To meet these the companies issue short endowment policies, on the assumption that payments limited to a term of ten or fifteen years may correspondingly exclude the extra hazard of a whole life insurance. Then there are cases which call for delayed consideration and postponement of final action, such as nephritic colic; albuminuria, when the cause is not differentiated between transient conditions and organic disease of the kidneys; recurrence of rheumatism uncoupled with transmission, diathesis or cardiac complication; recurring asthma; fistulas and abscesses; pulse rate over 90; blood-spitting from strain or injury to the air-passages. The period of probation, according to the instructions to the medical examiners of the companies, runs from six months to ten years.

When it comes to the morbid conditions which, under ironclad rules, call for imperative rejection, such as the lesions of tuberculosis, cerebral diseases, cardiac hypertrophy, dilatation, fatty degeneration and valvular lesions, clearly-marked albuminuria and glycosuria, gouty diathesis, scrofulous taint, ascites, hepatic colic, deformities, total blindness and deafness, etc., the way of the examiner is easy and the burden is light. When it comes to under-average or substandard features, due to flaws in family history, personal history or environment, our transatlantic cousins have taken the lead in grappling with the difficulties which such cases present in the adjustment of premiums commensurate with the extra hazard. One difficulty, obvious at first glance, arises from the insufficiency of data for the framework of a mortality table for lives not acceptable at ordinary rates. From the carefully compiled experience of the companies in the selection of healthy lives we obtain a trustworthy comparison of actual to expected deaths. But the data based on the widely varying mortality ratios of the companies dealing with impairment are of no practical value for tabular arrangement. The committee of the Scottish offices reports an extra mortality of 13 to 15 per cent. The Australian companies show a percentage of 18 per cent. But the London companies jump from a minimum of 44 per cent. to a maximum of 78 per cent. in excess of healthy lives. Notwithstanding such diversities the Institute of Actuaries added to its mortality tables, the value of which is gratefully recognized, a DMF table. But in the construction of this table the framers included a large number of lives so slightly impaired as to impose an extra of only two or three years. Obviously such irregular grouping would be an unsafe and uncertain guide in the adjustment of premium rates without adding to the latter a corresponding loading.

The American text-books or handbooks of medical examinations by Allen, Stillman, Levan, Keating, etc., and the manuals issued by the companies make little or no reference to the question of depreciation or deterioration and the assessment for its money equivalent. They

proceed on the lines originally laid down by such English authorities as Brinton and Sieveking. But the later English writers, Pollock and Chisolm, Haviland Hall, Thompson, Manly, Lyon, Hughes, etc., have given special consideration to lack of vital stamina and hereditary transmission and their place in the scale below the first-class standard. In determining the question of adequate rating they deal with each individual case separately on its own merits. This procedure may in some cases involve arbitrary or empirical ruling, but under existing conditions it offers the most available means of discrimination. In thus fixing an equilibrium between medical selection and finance, the medical director and the actuary must work hand in hand. In life insurance, medicine and mathematics are, as Dante says, *duo che insieme vanno*—two that go together.

The chief causes for the imposition of extra premium are thus classified by Dr. Pollock, physician to the Imperial Life, the Queen Insurance Co. and the London and Lancashire Life:

1. Family history of consumption or other diseases which set in before middle life.
2. Family history of gout, rheumatism and other diseases which set in mainly after middle life.
3. Flaws in personal health, defect in or excess of weight, etc.
4. Unhealthy or dangerous occupation.

In dealing with these forms of impairment, equity and security for both parties to the contract call for a careful estimate of the amount of extra premium and the way in which it should be applied, or, where this is undesirable, the alternative plan of scaling the face value of the policy—a sliding scale sometimes called the lien system—and by successive annual gradations decreasing the lien until it is extinguished. Under the latter plan the life that drops by the wayside early in the race pays the prescribed penalty of deduction from the face value, while lengthened continuance is rewarded with payment of the full amount when it becomes a claim. The English companies prefer the increased rate of pre-

mium, assuming that where the life is not up to the normal standard it may be considered as equal to a normal life of a greater age. In arriving at this age some of the actuaries prefer the statistical method, yet statistics here, as elsewhere, are often misleading. Keeping in view the classifications of vital statistics, they want to treat all cases on general principles, yet here, if anywhere, each case, as already remarked, must be considered on its individual merits.

Life companies are organized to meet contingencies, and the exclusion by our American companies of a large class who are justly entitled to their guardianship is not creditable to their principles and practice. Their governing maxim declares that the maintenance of selection is the security of the company. They lose sight of the fact that in underwriting everything is insurable at an adequate price. Refusal to bring the class in question within the fold of insurability frequently leads to satirical flings at the rejection of men who persist in walking the streets with a firm step year after year. There are thousands of declined cases of mitral regurgitation with sufficient muscular tone to resist dilatation and to maintain the balance of the circulation for a long period of years; thousands with occasional exhibitions of albumen or sugar whose unfailing endurance, elastic vigor and activity in business pursuits are remarkable; and thousands who are engaged in occupations in which there is liability to accidents from special exposures and exigencies, but where safety is assured by prudence. To this add the well-known fact that athletes, the pick of the gilt-edged class so eagerly sought by the companies, often die from heart strain or from reckless prodigality and exhaustion of their physical gifts before middle age, while the lightweight, with lack of vital force, whose application is unceremoniously turned down, prolongs his life by orderly, temperate, systematic habits, and defers the services of the undertaker until he becomes an octogenarian.

The fact that three attempts to insure impaired lives in the earlier years in this country ended in failure in consequence

of incompetent management should not discourage intelligent effort in this desirable direction. The same may be said of the recent discreditable history and disastrous ending of a Minnesota company which had been organized to solve the problem of compensatory rating. A Philadelphia company which has undertaken to insure substandard risks is, fortunately, in the hands of capable and honorable managers, and its course will be watched with confident anticipation of satisfactory results. The published mortality records of our leading companies embody much useful statistical information respecting hereditary taint; family history of fatal inheritance—consumption, cancer, heart disease, rheumatism, apoplexy, insanity and intemperance; underweights and overweights beyond the marginal allowance; dealers in intoxicants; and unhealthy or wearing occupations. With hints from such readily available sources, conjoined with the advantages of long training and experience, the medical directors of our life companies are admirably equipped for the estimation of under-average risks and the adequacy of the rates that will safely carry them to maturity.

It is said that an individual is very much more disposed to insure when he is convinced that he falls below the standard, and when anxiety in such a case is manifest, suspicion is aroused, either of a want of consciousness, or possibly of fraudulent intent. But if the applicant understands that special provision is made for his weakness there will be no reason for concealment, and the all-important question of moral hazard will be eliminated from the investigation.

ARREST OF HICCOUGH BY DEPRESSING THE TONGUE.

Ry Louis Kolipinski, M.D.,

Washington, D. C.

HICCOUGH, like vomiting, is often so severe and persistent that credit or discredit is bestowed on a physician in a case dependent on his ability to stop it. The method described below is offered that further trial may demonstrate whether it possesses sufficient value to be included

in the list of means at present in our possession for checking this troublesome and often distressing symptom common alike to a number of curable and fatal diseases.

C. H., fifty-nine years of age, a shoemaker of vigorous constitution, but somewhat impaired from the long-continued use of alcoholic intoxicants, had suffered from chronic gastritis. December 14, 1898, he was able to go to work, but complained of headache, vomiting and oppression of the chest. A persistent hiccough began. That night he could obtain but little sleep. The next day he was not able to eat his meals. The hiccough growing worse, he took some remedies of an apothecary and also sent for a physician. He made an attempt at his daily work, but soon gave it up and returned home. He slept but little, the hiccough being so violent that his bed shook, and he passed the night mostly sitting up. Various home remedies next were tried, but without relief.

On the 16th he found himself too weak to work, and remained in bed, passing another sleepless night. December 17, condition the same; he went to his shop, but had to return home. He had no sleep at night, but was "up and down." His throat felt swollen and full, so that he suffered much from dread of death by suffocation.

December 18 the condition is the same. I saw the patient that night. He was much alarmed; declared the hiccough was killing him. I tried to reassure the patient, and directed him to breathe slowly, lying supine and to extend his arms above his head. The hiccough caused a tremor of his whole body.

He complained of the fullness in his throat, a condition which he thought the result of the hiccough. I directed him to sit up, and, with a large spoon handle, pressing the tongue down and back with steady force, was enabled to inspect the fauces. I found the soft palate congested and the uvula thickened and elongated. The hiccough recurred twice, and I could note each time the elevation of the soft palate and uvula in the act.

I continued the firm pressure on the tongue with the hope of further noting

the action of the palatal muscles, when, to my surprise and to the patient's great astonishment and joy, the hiccough ceased. Under a dose of morphine and chloral he passed a comfortable night.

An hour after my departure the hiccough returned, but the patient, with great zeal and confidence, placed himself in front of a mirror, passed the spoon handle to the back of the tongue, and with both hands, depressed and steadied it. The hiccough at once ceased. In the morning, on awakening, the hiccough again returned, but stopped spontaneously on his getting up and dressing.

Two days later it reappeared, but was promptly arrested by the patient himself in the manner described. The time required in each instance to accomplish the desired result was one minute or less.

Society Reports.

NEW YORK ACADEMY OF MEDICINE—SECTION IN ORTHOPEDIC SURGERY.

MEETING HELD NOVEMBER 18, 1898.

DR. W. R. TOWNSEND read a paper entitled "The Prevention of Deformity After Excision of the Knee in Children."

He reported the histories of eight cases seen within the past two years at the Hospital for the Relief of the Ruptured and Crippled, in which excision had been performed in early life in other hospitals. All of these cases presented some shortening, the greatest amount being nine and one-half inches, the least one-half inch. They all presented flexion deformity; the greatest was held at right angle, the least deformity was 25 degrees, the average being nearly 50 degrees. Two showed bow-leg deformity and one knock-knee. Two had motion and six were firm. He quoted the views of several orthopedic text-books and the "Treatise of Surgery by American Authors" to show that the operation was indicated only in exceptional cases. The shortening was greatest when both epiphyses of femur and tibia were removed, and in early childhood, with extensive disease present, it was difficult to remove all diseased tissue without invading the carti-

lage between the epiphysis and the shaft of the bone. He showed the necessity of long-continued after-treatment, either by plaster of Paris or some form of brace if deformity was to be prevented, for many cases of apparent bony union began to present deformity months after the operation, and in some it rapidly decreased. The different methods of correcting the deformities were referred to, and forcible correction, under an anesthetic, was advised only in those cases where, by very slight pressure, the flexion deformity could be overcome. In several cases osteotomy or another excision was advised. Braces and operative procedures were advocated for the bow-leg and knock-knee deformities.

To illustrate some points made in the paper he presented two patients who had had excision of the knee in early life. The first patient was a boy fifteen and one-half years of age, who had an excision performed when he was three years old for a tubercular osteitis of the right knee. He was admitted to the Hospital for the Relief of the Ruptured and Crippled at the age of six, with slight flexion deformity and two discharging sinuses. The treatment was local and constitutional. The flexion deformity was corrected by manual force under an anesthetic. At the age of ten there were six inches of shortening. At present there were nine and one-half inches—six inches in the femur and three and one-half inches in the lower leg. By tilting his pelvis he walks quite well with a seven-and-one-half-inch patten, despite the bow-legs on the right side and the absence of the motion at the knee. The bow-leg deformity has increased of late years and is now well marked. This and knock-knee deformity were both liable to occur unless protection was given to the knee for a considerable time after the operation of excision.

The second patient was a boy of nine years whose left knee was excised in Germany. On admission to the Hospital for the Relief of the Ruptured and Crippled, when he was eight years of age, there were 65 degrees of flexion deformity and slight motion. The flexion was easily reduced by manual force to 20 degrees,

with less than 10 degrees of motion. His right femur was eleven and one-quarter inches long, his left ten, his right leg thirteen inches, his left twelve. The shortening was a trifle over two inches. He illustrated the ordinary form of flexion deformity and also the fact that bony union did not always occur. He was wearing a Thomas knee brace, with straps attached to the foot-plate and these fastened to buckles and adhesive plasters applied to the leg below the knee. Continual traction was thus made, and the knee was slowly but surely being straightened. It was needless to add that for this traction to be efficacious in reducing the deformity it should be continuous and carried to the full limit.

Dr. R. Whitman added foot-drop, from division of the external popliteal nerve, as a possible disability following excision of the knee. He had seen two cases in which the nerve had been divided, either during excision or else during previous treatment of an abscess. One of these patients had four inches of shortening and knock-knee, but his most serious disability was caused by the foot-drop, which necessitated a special apparatus. The course of this nerve should be borne in mind in all operations about the knee.

Dr. R. H. Sayre said that operative surgeons were too prone to think that supervision of a case might cease with healing of the wound, whereas they would learn, if they followed their results for several years, that relapses were very frequent in cases that were not protected for long periods of time after operation. This was especially true, not only in excisions, but also in club-foot and various rachitic deformities. In using the Thomas splint, with a foot-plate to prevent dropping of the anterior part of the foot, he thought that friction and the pressure of the foot would prevent the foot-plate from sliding on the rods and would thus interfere with the straightening of a bent knee or the relieving of an inflamed knee from pressure. He preferred to keep the toe up by pulling down the heel by a strap fastened to the bottom of the splint and buckled to the back of the heel of the shoe.

Dr. Townsend said that the foot-plate

on the Thomas knee brace was intended only for patients who were not walking and when there is no danger of injury being done by jarring. The leather traction strap was used for walking patients.

Dr. A. B. Judson said that these deformities were simple in kind—lateral bending, which caused knock-knee or bow-leg and antero-posterior bending, producing flexion or hyperextension. The mechanical treatment was also simple, consisting of the application of pressure and counter-pressure in such directions as to oppose the deformity. If the patient was walking much of the force thus applied laterally would be absorbed in helping to sustain weight, instead of being used against the deformity, and the recumbent position or an ischiatic crutch would have to be considered. Patients deformed after excision did not readily submit to tedious mechanical treatment, which, if it had been prescribed at first, might have led, in due time, to recovery without deformity. Formerly the established treatment for white swelling of the knee was amputation. Then the high-water mark was found in the conservative operation of excision. We now, however, had a more perfect conservatism in mechanical treatment, which avoided the reproach of being mere expectation, because it gave to the affected part a new and radically different environment, taking the limb from its laborious position under the weight of the body and giving it pendency and rest.

Dr. V. P. Gibney said that if the case was desperate enough to demand excision, then amputation was the preferable operation. He had been forced to this conclusion by many years of hospital out-patient observation. The high, ungainly patters, supplemented by springs for the legs to protect the ankles, did not compare with an artificial limb either practically or cosmetically. He would ask the author of the paper whether a patient with extreme shortening following excision would not be better off in afterlife if an amputation were done. After the leg was straightened in these cases the patients were sure to return later for treatment. He would amputate and apply an artificial limb, especially when the

patient was as old as the fifteen-year old boy who had been exhibited.

Dr. Townsend said that if the patient referred to were a man instead of a boy he would advocate amputation. For himself, if he had such a leg, and were rich enough to have a new artificial leg every three or four years, he would much prefer to have the leg amputated than to wear such a heavy apparatus.

Dr. Sayre said that if the amputation should be thought best on account of the great shortening of the leg after excision it would be best to amputate above the knee and so gain the advantage of a movable knee-joint. But it would often be wiser to fasten an artificial limb to the patient's foot when in a position of marked equinus than to do a Syme's or Pirogoff's amputation. He recalled a case in which there had been a failure of growth in one femur, with shortening for nine or ten inches, all the joint motions being perfect. The patient wore an artificial leg attached to his foot and walked with hardly any limp, the difference being noticed only when he was seated, the knees then being at different heights above the floor.

Dr. Judson said that the apparatus referred to was very useful, but that generally it could be improved by making a firmer pocket for the reception of the foot as it inclined downward in extreme extension. This part could be made not only extremely firm, but also adjustable at will by the use of webbing and buckles. The apparatus could also be improved by making it strong enough to transfer a part of the weight of the body from the anterior part of the foot to the tibia, near its tubercle, as was done in the ordinary brace for talipes calcarious.

Dr. Townsend said that people walked better when the limb was amputated below the knee, but, of course, this applied to persons with a movable knee. When the femur was shortened several inches and the knee ankylosed an amputation of the thigh would have to be done in the lower third of the femur, and by so doing a movable knee could be obtained.

Elongation of the Femur Following Necrosis.—*Dr. Townsend* also presented a

man fifty-five years of age, a laborer by occupation, whose right femur was two and one-eighths longer than his left. He walked with scarcely any limp and wore a shoe raised one and one-half inches. The history he gave was that he was perfectly well until the age of twelve, when, from some unknown cause, a swelling occurred on the lower and inner side of the thigh and when it broke some pieces of dead bone came away, and pieces continued to come away for nearly a year. Up to the time of this swelling his two limbs had been of equal length. The lengthening began to be noticed about the age of thirteen and had reached its maximum when he became of age. The knee joint had always been freely movable and was perfectly so today. The necrosis affecting the lower end of the femur evidently in this case had produced an irritation and increased growth of the cartilage and bone at the junction of the lower epiphysis to the shaft. Lengthening from this cause had been noted in osteitis, but this was the greatest amount *Dr. Townsend* had ever seen. The circumference of the thighs and legs was the same, and there was a small depressed white cicatrix above the inner condyle.

Dr. Sayre said that the suggestion had been made that after excision of the knee the epiphysis of the opposite leg be scratched in order to prevent it from outstripping the affected limb in growth. But the effect of the irritation of the epiphysis in the patient exhibited would indicate that artificial irritation might cause increased instead of diminished growth. He recalled a case in which osteitis affecting the hip had caused increase in the length of the limb, but not so much as in *Dr. Townsend's* patient.

Dr. Gibney said that *Dr. James Berry* of Portsmouth, N. H., had analyzed a large number of cases of osteitis of the knee-joint, and in all of them there had been elongation. He wrote a paper upon the subject some ten or twelve years ago based upon his observations at the Hospital for the Ruptured and Crippled, at which time he was house officer. None of the cases analyzed was treated by the protection apparatus, and a perineal crutch was not used. So we need not lay

this elongation to the apparatus now employed.

Dr. Whitman recalled a case similar to that of *Dr. Townsend*. A man was admitted to hospital for fracture of the femur, which was found to be one and one-half inches longer than its fellow. There were several sinuses of indefinite duration. The thigh was amputated because of failure in repair. At the point of fracture the bone was hypertrophied and eburnated, which accounted for the non-union. The lengthening had been due to constant irritation of a fragment of necrosed bone. The most common cause of elongation of bone was specific disease.

Coxa Vara.—*Dr. Whitman* exhibited a boy seventeen years old affected with typical left coxa vara of two and one-half years' duration. The patient had been under observation for two years. A perineal crutch, after being in use for about eight months, was discarded nine months ago. He had had no other treatment. The trochanter was above Nélaton's line and displaced forward, causing a very noticeable change in its contour. The leg was adducted and rotated outward, and a moderate degree of compensatory knock-knee was present. Flexion of the thigh was checked at 120 degrees, but extension was more than normal. These appearances and changes indicated that the neck of the femur was depressed beyond a right angle with the shaft and twisted backward. The patient had been before the Section on May 21, 1897. At that time the actual shortening had been one-half inch (see the MARYLAND MEDICAL JOURNAL, July 31, 1897, p. 282.—*Editor*), which had increased to one and one-half inches. Apparent shortening, due to adduction, had increased from one and one-half inches to three inches, and motion had become more limited. An operation was advised, in order to secure relief from the discomfort caused by lameness and restricted motion. Osteotomy would be done below the trochanter to correct the adduction and outward rotation. In younger subjects with less advanced deformity a cuneiform section should be made from the base of the

trochanter to actually restore the proper angle of the neck.

Erythema Nodosum or Neuromata.—*Dr. S. Ketch* presented a man who had applied to the Orthopedic Dispensary for relief from a condition which could not be classified among the affections known as orthopedic, the diagnosis lying between erythema nodosum and neuromata. The patient was a Russian, thirty-five years of age, and a peddler. He complained of intense pain in the lower extremities, coming on eighteen months ago in the right leg and a few weeks ago in the left. The pain was more severe when he was resting, and was limited to an increasing number of points below the knee, one being at the lower part of the posterior surface of the right thigh. At these places there were slight reddened swellings, pressure on which caused pain altogether out of proportion with the appearances. There was a moderate degree of double flat-foot, of which he did not complain, and a slightly varicose condition of the veins. Otherwise he appeared perfectly well and denied rheumatism and venereal disease.

Dr. Whitman did not think that the pain was due to neuromata, because the swellings did not correspond to the course of any nerve, and the appearances were not those of neuromata.

Dr. Sayre said that, as there was some evidence of acute inflammation of the veins, the trouble might have had its origin there.

Dr. Ketch said that acute erythema nodosum might well cause an inflammatory condition of the veins.

Medical Progress.

REPORT OF PROGRESS IN ORTHOPEDIC SURGERY.

By *R. Tunstall Taylor, M.D.*,

Surgeon to the Hospital for Crippled and Deformed Children, Baltimore; Fellow of the American Orthopedic Association, etc.

FORCIBLE CORRECTION OF THE DEFORMITY OF POTT'S DISEASE.

ROBERT JONES (*Liverpool Medico-Chirurgical Journal*, January, 1898.) reports seventy cases operated on more or less successfully, with but two deaths. Their

ages ranged from eighteen months to twenty-two years. The curves had existed from six months to six years, and eight of the patients had recovered from one or more attacks of paraplegia. Five had paraplegia at the time of the operation, and three recovered after the operation and apparently as the result of the operation. A fourth was very much improved. Of the reductions two-thirds were completed at the first sitting and "of the rest it might be said that either other operations were required or I thought it inadvisable to use sufficient force to completely overcome the hump." Four-fifths of the cases were in the dorsal region, where the deformity is most easily reduced, on account of favorable leverage.

In one of his cases (an adult) with paraplegia there was loss of sensation, which returned over a large area after reduction of the deformity. The curves that he has found best suited for reduction are (a) those occurring in the young, (b) those in which the disease is active, and (c) those in which the deformity is changing. Ankylosed spines render the operation more dangerous, but subsequent consolidation is more rapid. The presence of lumbar abscess is a contraindication for operation, but psoas abscess is not. He uses practically the Calot operation of traction on the head and extremities under an anesthetic (chloroform), pressuredown upon the kyphos, and pressure upward against the lumbar vertebrae, which is facilitated by previously purging the bowels for several days. He requires seven assistants, and estimates the traction at seventy kilos, while 220 kilos would be required to fatally fracture the neck. He includes the head and neck in the plaster corset, which he applies while traction is maintained after reduction, but he prefers an apparatus similar to the double hip splint of Thomas, by which he can preserve the forced lordosis.

In one private case that died no post-mortem was allowed; the other died apparently of scarlet fever, and no peritonitis nor adhesions to the spine were found. There was no tearing of the soft parts in front of the deformity, no collection of pus nor blood. He reports the

case of a child, a subject of spinal caries, who died of some intercurrent disease, on whom Mr. Murray performed a post-mortem reduction of the deformity. The autopsy showed laceration of the right longus colli muscle and an opening one cubic inch in size where the bodies of the seventh cervical and first dorsal vertebrae had been. This space was bounded laterally by fractured cancellous bone, exposing posteriorly the intact dura mater of the cord. The capsular ligaments of the right articular processes of the sixth and seventh cervical vertebrae were also torn through.

A CASE OF FORCIBLE REDUCTION OF THE
DEFORMITY OF VERTEBRAL TUBERCULOSIS;
DEATH AFTER THREE
MONTHS AND AUTOPSY
REPORT.

Sherman (*Pacific Record of Medicine and Surgery*, San Francisco, October 15, 1898,) reports the successful correction by manual traction and pressure of a rectangular deformity in a lad of eight. The patient's condition was unfavorable from the first. Temperature, pulse and respiration went up gradually. At the end of six weeks he had pain in the anterior chest. On the 102d day he died suddenly. An autopsy showed abnormal mobility and crepitation from the sixth to the eleventh dorsal vertebrae. Right pleura lacerated in three places, partially closed by adhesions, contained four ounces of creamy-green offensive tubercular pus; left pleura contained twenty ounces of the same, admitted through two large patulous openings; no adhesions. The pericardial sac contained a large quantity of straw-colored fluid. Large abscess revealed, surrounding spine on removal of heart and lungs. From sixth to twelfth dorsal vertebrae "wormeaten," and bodies of eighth and tenth entirely gone. Miliary tuberculosis of liver and spleen. The writer lost two other cases in addition after forcible correction, one of asthenia following syphilis, and the other of an abscess which developed subsequently and discharged freely in the neck. He condemns the present "furor for doing this operation."

MECHANICAL TREATMENT IN FORCIBLE STRAIGHTENING OF ANGULAR CURVATURE.

Toles (*Southern California Practitioner*, Los Angeles, November, 1898,) describes a troughed table, with lever and ratchet arrangement to control the horizontal traction by means of a modified Sayre head sling. The pelvis is made fast to the foot of the table by means of a plaster of Paris pelvic girdle previously applied, in which straps are incorporated. Pressure is exerted downward on the kyphos in the usual manner when traction alone will not straighten the deformed spine. The correction is maintained by a plaster corset and a jury-mast and head sling of original construction. The jury-mast has two uprights from the antero-lateral aspect of the jacket, which arch over the head diagonally to be imbedded in the postero-lateral aspect of the jacket. The head sling is applied to the center of this arch while the mechanical traction of correction is maintained.

CORRECTION OF DEFORMITY IN POTT'S DISEASE.

Goldthwait (*Boston Medical and Surgical Journal*, July 28, 1898,) describes an original apparatus for the correction of hump-back dependent not so much upon traction on the spine as upon its hyperextension. The patient lies upon two padded bars of steel partly bent to conform to the curve of the spine from the knuckle to the buttocks. The bars lie immediately under the transverse processes of the vertebrae. The portion of the spine above the deformity is unsupported, and it, with the head, is allowed to sag down until the desired amount of hyperextension (i. e., straightening) is attained. In this position a plaster of Paris jacket is applied, including the supporting steel bars, which can subsequently be withdrawn. No head support is used. He reports numerous successful cases and marked improvement in paraplegic symptoms in some cases.

A NEW METHOD OF RESTORING THE AB- SENT FUNCTION OF MUSCLES IN INFANTILE PARALYSIS.

Noble Smith (*Lancet*, November 5, 1898,) reports two cases in which the

weakest muscles of the paralyzed legs, on electrical examination before operation, showed an almost total absence of response to faradism, and the reaction of degeneration to galvanism, after tenotomy of their tendons showed most marked gain in electrical irritability and power. He was led to do this operation by the well-known gain in circulation, warmth and power seen after division of the tendo Achillis in cases of simple talipes equinus in the whole leg, and found on trial that the weaker as well as the stronger were greatly improved after tenotomy. He has had satisfactory results in a number of cases, but in only two were complete electrical records kept before and after operation as reported above.

ON THE PREVENTION AND CORRECTION OF SHORT-LEG IN HIP DISEASE.

Robert Jones (*Lancet*, December 17, 1898,) suggests, in common with American orthopedists, that even when the tuberculous process is active, contrary to the opinion of Watson Cheyne and others, any malposition of the hip should be corrected manually or by *brissement forcé* or pulleys, and further (1) that abduction of the diseased limb should be maintained; (2) that the apparatus to attain this should also govern flexion and adverse pelvic tilting; (3) that where arrest of growth threatens pelvic obliquity should be summoned to assist, and (4) that where displacement of the head has occurred immediate reduction should be attempted. For the correction of short-leg with bony ankylosis suggests: (1) That oblique transtrochanteric osteotomy should be performed;* (2) that the adductors should be subcutaneously divided; (3) that the limb should be placed in the position of abduction and extension and kept there until firm union occurs; (4) that after union the splint should be removed and the limb allowed to slowly leave the abducted position; (5) that exercises should be systematically performed in order to depress the pelvis towards the affected side; (6) that in case of fibrous ankylosis, where no osteotomy has been performed, in order to avoid re-

*Preferably to Gant's or Adams' operation.

currence the abduction should be maintained for considerably longer, and (7) that this treatment should as much as possible be carried out in the open air.

HOT AIR IN JOINT DISEASES.

Wilson (*Annals of Surgery*, February, 1899,) states that he has used super-heated air with the hot-air ovens in a large number of the various joint troubles with varying results. He advocates flannel bandages to the limb instead of gauze or cotton as being more absorbent to the perspiration incident, to prevent scalding. In acute sprains, with rest, the application of a temperature of 380° F. twice has proved curative in thirty-six hours. This method of treatment has been disappointing in acute and chronic gout, rheumatism and rheumatoid arthritis. Hydrarthrosis appears to offer a field of usefulness and the effusion is more rapidly absorbed. He uses a lower degree of heat (250° to 300°) for two hours daily, as this produces more sweating in the last-named trouble.

In fibrous ankylosis it is undoubtedly indicated with a beginning temperature of 300°, and running it up to 400° several times in an hour, with occasional ventilation to get rid of the excess of moisture. This treatment led to a gain in the range of motion from 15° to 45°. There are cases, however, that show no gain.

Inveterate flat-foot yields good results to this method of treatment when supplemented with forcible manipulation and mechanical correction.

As yet the writer will not speak definitely on the action of high heat in tuberculous joints, but is led by his experience with it, plus immobilization, to think that decided and appreciable benefit has been obtained with the highest degrees.

THE BOOT AS AN ORTHOPEDIC APPLIANCE.

Galloway (the *Canadian Journal of Medicine and Surgery*, 1899, pp. 17 to 25,) calls attention to the importance of having the sole of flat-foot and club-foot boots, as well as cork-soled boots, spread out like a truncated pyramid, to afford as large a bearing surface for the weight of the body as possible. Few shoemakers make the soles of shoes flat, but convex

from side to side, and are, therefore, unstable supports, a marked error in orthopedic cases, where there is a deficiency and lack of support on one or both sides.

He names five chief faults in the ordinary cork-soled boot:

1. The shape does not correspond to the shape of the foot.
2. The sole is too narrow.
3. The sole is convex from side to side.
4. The heel is too small and it is preferable to have sole and heel one piece.
5. The shank is weak and unsupported.

STUDIES IN SERUM DIAGNOSIS.—Drs. Richard C. Cabot and F. L. Lowell have been making an investigation on the out-patients of the Massachusetts General Hospital on Widal's reaction and especially the three points, the frequency of the reaction in non-typhoid cases, the frequency of a reaction persisting after convalescence and the intensity of the reaction at different periods of the course of cases of typhoid. Their results, which appear in the *Boston Medical and Surgical Journal*, are as follows:

1. The Widal test can easily be carried out in out-patient work.
2. Two hundred and four cases of disease other than typhoid tested, all with negative results.
3. Thirty-nine cases of sure typhoid tested at periods of from one to eighteen months after defervescence; thirteen of these reacted positively, one at a dilution of 1 to 100.
4. Nine cases tested quantitatively; one case reacted at 1 to 1000 for several weeks. No data of prognostic value obtained.

* * *

OVARY ABSCESS AFTER PNEUMONIA.—Dirner (*British Medical Journal*) reports the removal of an ovarian tumor as big as the fetal head from a multiparous woman, aged thirty-two. It had developed during convalescence from double pneumonia. Thus puerperal infection was out of the question, whilst there was no evidence of the existence of the bacillus coli communis.

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BALTIMORE, FEBRUARY 25, 1899.

THE State Medical Examining Board had, at the time of its creation, the duties only of examining candidates and weeding out the fit from the unfit. Later it was seen that those who failed, too often practiced without respect to the law or their failure, and the difficulties of convicting such men were great. Now the Board has extended its work and not only examines and licenses or rejects, but it attempts to spy out the unfit, and employs a lawyer to see that such law-breakers are punished—truly a work which the State ought to do, but which the proper State official has never done.

One of the main obstacles to convicting these lawbreakers has been the difficulties of defining what the practice of medicine is. In the *New York Medical Journal* of the past few weeks there is running a series of articles of especial interest entitled "The Law In Its Relation to Physicians," by Arthur N. Taylor, LL.B., and this series every physician should read. One of the questions put by this authority is, "What constitutes practicing medicine?" and this he

does not answer in so many words, but proceeds to quote cases and decisions which have been left to a judge and jury.

According to the decisions quoted in this article almost any kind of medical advice and treatment, whether it be from a clairvoyant or a so-called "divine healer," is practicing medicine, and as such the one practicing is amenable to the law and its consequences. The great difficulty State boards have—and this seems to be especially marked in Maryland—is to obtain a sufficient number of reliable witnesses who will give intelligent testimony and who, when on the stand, will not be frightened out of saying what they have already in private told the Board.

The object of these laws is not to restrict personal liberty in practicing medicine, but to protect ignorant persons who are so easily robbed of health and money by irregulars. The profession should help their State boards and give them credit for the hard work they do.

* * *

AS WEEK by week the various committees of arrangement for the State Society's centennial celebration in April meet, the **The Faculty's Centennial.** work is gradually brought nearer completion. At the last meeting acceptances were read from several of those invited to make addresses. There was also read a communication from President D. C. Gilman of the Johns Hopkins University, putting at the disposal of the Faculty any of the public halls of that university. This offer was accepted and a vote of thanks was passed.

The committee on transportation will probably arrange special rates from all parts of the State and from the bordering States.

A committee of which Dr. Charles M. Ellis of Elkton is chairman was authorized to communicate with all county medical societies in reference to a representation at this centennial meeting, and this committee will also endeavor to have formed societies in those counties in which heretofore no societies have existed or do exist. Further announcements will be made from time to time.

Attention is again called to any portraits, engravings and relics of interest, notice of which should be sent to Dr. Osler or Miss Noyes, the Faculty librarian.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending February 18, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	..	..
La Grippe.....	..	10
Pneumonia.....	..	39
Phthisis Pulmonalis.....	1	20
Measles.....	8	..
Whooping Cough.....	..	..
Pseudo-Membranous Croup and Diphtheria. }	36	12
Mumps.....	..	..
Scarlet Fever.....	9	2
Varioloid.....	..	..
Varicella.....	3	..
Typhoid Fever.....	2	1

New York is still struggling with a pure-food bill.

Harvard University is to have a professor of hygiene.

Joseph Coats, the celebrated Glasgow pathologist, is dead.

Dr. W. T. Sutton, a leading physician of Norfolk, is dead.

Every now and then the papers announce "mild cases" of smallpox.

New clinical wards in the Hospital of Santa Maria Nuova at Florence have been opened.

Brouardel has been re-elected dean of the Faculty of Medicine of the University of Paris.

Dr. J. M. Da Costa has been elected as a member of the board of trustees of the University of Pennsylvania.

Helferich, late of Greifswald, has been elected to succeed Esmarch, who lately resigned the chair of surgery at Kiel.

Dr. Roux, the subdirector of the Pasteur Institute at Paris, has been elected a member of the French Academy of Sciences.

A bust of von Helmholtz is to be erected in the court of the University of Berlin between the statues of the two Humboldts.

The Vienna Medical Club has established a prize of 300 golden crowns in memory of Dr. Miller, who died of the plague recently.

Dr. G. C. Thieme has been appointed a vaccine physician for the third ward of Baltimore to succeed Dr. C. F. Blake, who resigned.

Dr. George H. Stone, who for two years was president of the Georgia State Medical Society, died at his home in Savannah last Sunday.

The International Hospital at Paris, founded by Péan, is now called l'Hôpital Péan. Delaunay, formerly Péan's chief of clinic, succeeds him.

Wisconsin is considering the passage of a law against tight lacing. All the young legislators are trying to get on the examining committee.

At last accounts there were fourteen cases of smallpox at the Emergency Hospital in Washington and two at the Quarantine Hospital in Baltimore.

It is said that 100 deaths occur in New York annually from drug substitution caused in part by the long hours which drug clerks are obliged to keep.

The three medical examining boards of Connecticut have agreed that 75 per cent. of all the questions asked must be answered correctly. This past year 40 per cent. of the candidates failed to pass.

The Tri-State Medical Association of Mississippi, Arkansas and Tennessee has passed resolutions of sympathy and support for Parke, Davis & Co. and the *Medical Age*, who are defendants in a suit brought by a certain osteopath named William Smith.

A French physiologist claims to have discovered a chemical substance which, when put in a closed space, will thoroughly renew the air. Thus small rooms may be ventilated and renewed sufficiently for use for twenty-four hours by the use of this new substance.

The physicians of the extreme Northwest, including such States as California, Oregon, Washington, Nevada and Arizona, are talking of forming a medical association of their own, because they are usually so far away from the meetings of the American Medical Association.

Among the recent deaths among physicians is that of Dr. William C. Campbell of New York, who died recently of pneumonia. Dr. Campbell was a graduate of Princeton and later of the College of Physicians and Surgeons in 1880. He was at one time resident physician at St. Luke's Hospital, and had just been appointed visiting physician to that hospital.

Washington Notes.

Acting Assistant Surgeon George A. Sheldon, now in this city, has been ordered to Havana for duty.

The prevalence of diphtheria at Congress Heights has necessitated the closing of the public school for an indefinite time. Whole families of from five to eight members have been stricken with the disease.

There were 120 deaths in the District last week, twenty-five of which were from pneumonia, one from typhoid, four from diphtheria and ten from grippe. There are seventy-six cases of diphtheria and 122 cases of scarlet fever in isolation.

General Sternberg has placed before the Senate a reply to the criticisms of Dr. Leffingwell in reference to the surgeon-general's experiments. The General ably defends himself, and points out the necessity of the experiments for the advancement of medical knowledge and the good of humanity.

The House has reported favorably upon a bill to give Surgeon-General W. A. Hammond (retired) the pay of his rank. When Dr. Hammond retired in 1878 he was a rich man, and at his own request was retired without pay. His recent business reverses have prompted him to ask that he be given his pay as a retired officer. The bill carries no arrearages of pay.

A Cesarean operation was performed Sunday last at the Freedmen's Hospital. The patient was a small hunchbacked colored woman weighing about ninety pounds and standing four feet two inches high. The mother and infant are doing well. This makes the third operation of the kind performed in the hospital in the last two years, and in none was there a fatal conclusion.

Fifty thousand dollars has been appropriated by Congress to fight the present epidemic of smallpox, which has already reached some proportions. About twenty-five cases are now in the hospital and the suspects are innumerable. Every few days an unsuspected case turns up at some dispensary with the characteristic eruption, which has been present for some two to five days. In every section of the city cases have developed and much apprehension is shown by the health department. A house to house inspection and compulsory vaccination is the plan of campaign in thickly populated alleys in all parts of the city.

Book Reviews.

A TEXT-BOOK OF PRACTICAL THERAPEUTICS. With Especial Reference to the Application of Remedial Measures to Disease and their Employment upon a Rational Basis. By Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia, etc. Seventh Edition, Revised. Philadelphia and New York: Lea Bros. & Co. 1898.

Hare's works are evidently very popular, for new editions of them rarely fail to come out annually. This work on Therapeutics has reached its seventh edition and is again revised up to the time of publication. A few new illustrations have been added. The text conforms to the Pharmacopeia of the United States and to the British Pharmacopeia. Like the former editions, it is divided into four parts. Part I contains general therapeutical considerations; Part II contains a list of drugs; Part III contains remedial measures other than drugs and foods for the sick, and Part IV contains a list of the diseases and various tables and indexes. The work is conveniently arranged and will long be used.

Obstetrics is a monthly journal published in New York and edited by Dr. Edward A. Ayers and an advisory board on which is, among others, Dr. John Whitridge Williams of Baltimore. It is an attractive monthly, well printed and in a most convenient form and contains work by good men. It has no salutatory or apology for existence and looks as if it had come to stay.

REPRINTS, ETC., RECEIVED.

Maryland Medical College of Baltimore, 1898-99.

Annual Announcement and Catalogue of the Baltimore Medical College. 1898-99.

Modern Treatment of Tuberculosis. By Charles Denison, A.M., M.D. Reprint from the *Journal*.

Nitroglycerine as a Hemostatic in Hemoptysis. By Lawrence F. Flick, M.D. Reprint from the *Philadelphia Medical Journal*.

Immunity the Fundamental Principle Underlying All Treatment of Tuberculosis. By Lawrence Flick, M.D. Reprint from the *Journal*.

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Original Articles.

HEADACHES.

CAUSES AND TREATMENT, WITH ESPECIAL
REFERENCE TO NASAL AND
OCULAR HEADACHES.

By A. D. McConachie, M.D.,

Physician to the Presbyterian Eye, Ear and Throat
Charity Hospital; Ophthalmologist to Bay View
Hospital, Baltimore, Md.

READ BEFORE THE MARYLAND OPHTHALMOLOGICAL
AND OTOLOGICAL SOCIETY, FEBRUARY 23, 1899.

HEADACHE—intense or slight, dull, sharp or cutting, superficial or deep-seated, confined to special parts, as the temples, forehead, occiput, vertex, or to one spot, of sudden or gradual onset, of short or long duration, associated with disordered sensations, as giddiness or disturbed vision—occurs in one or more members of nearly every family at some time during their lives. There are many varieties—structural headache, dependent upon disease within the skull; congestive, sick headache or migraine, toxemic headache and reflex. But, whether of one kind or another, there is no functional disease or symptom of disease that is so general, so obstinate, that causes so many ruined lives, that reduces the vitality and thus opens the way for the onset of other and more fatal diseases. Many have been treated for a lifetime without cure. Headaches and sick headaches have been an opprobrium to medicine, but, thanks to the searchlight of the study of origins or cause and effect, we are now able to battle successfully with a large percentage of them.

Hitherto the phenomena of headache have been viewed too much from one organ instead of the whole individual. I

think in all cases presenting persistent headaches it is our duty to go beyond the examination of the eye, nose or nervous system. We should examine the case from the standpoint of internal medicine, because those conditions can be relieved in many cases, only by the treatment of the patient as an individual. This was emphasized to me recently in a case of periodical, persistent headache for which I had corrected anomalous conditions in refraction and muscles and removed nasal spurs which had impinged upon congested and partially hypertrophied turbinates; yet headaches continued. Upon examination of the urine, albuminuria was discovered and suitable hygienic exercise and dietary prescribed with marked amelioration, his exacerbations being less intense, of longer intervals and much shorter duration. Many headaches may be considered as belonging to the class of functional neuroses, and are a common phenomena among hysterics and neurasthenics in whose blood is found abnormal amounts of fibrin and fibrinogen, shown in the spontaneous sedimentation. Headache is one of the neuroses, and, therefore, is another manifestation of disturbed oxidation processes, as are gout, diabetes, rheumatism, infectious diseases, etc. The so-called functional neuroses are not a primary affection of the central nervous system, but a secondary symptom-complex, resulting from the effect on the nervous system of the products of primary abnormal oxidation processes.

The pathology and symptoms of structural headache, due to disease of the brain or of its membranes, such as meningitis, cerebral abscess and tumor, are not difficult to account for. In meningitis, abscesses and tumors it is quite probable that the severe headache is caused by the

irritation of the meningeal nerves, and if it be true, as is claimed by some observers, that sensory nerve fibers exist in the vessels of the brain the phenomena of congestive, toxemic and reflex headaches can be accounted for, as their distention would give rise to pain. It is quite probable that the congestion of the mucous membrane lining some of the accessory cavities of the nose, viz., antrum of Highmore, ethmoidal cells, sphenoidal cells or frontal sinuses, is accountable for many of the frontal headaches coming on after the use of the eyes or as a sequel to active or passive inflammatory conditions in the nose.

Congestive headaches, active or passive, may be brought about by mental or emotional excitement, menstrual irregularities, general plethora or hypertrophy of the heart, due to structural valvular disease, dyspnea, asthma, defective action of the bowels, liver or skin. It may be the after-effect of drunkenness, or it may result from any depressed condition, as anemia, fatigue, loss of blood, or follow mental exertion, overexcitement or bodily fatigue, all of which reduce the tonicity of the blood-vessels of the brain and favor congestion. Toxemic headache attends all inflammations and fevers, and though due in some measure to cerebral congestion, is largely dependent upon an altered condition of the blood, changed in character and carrying toxins or ptomaines which act detrimentally on the nervous elements of the brain.

So in uremia, headaches which point to renal deficiency result from the morbid condition of the blood; so the headaches of malaria and other acute diseases. In the more chronic affections, rheumatism, syphilis, gout, etc., all, no doubt, cause to be thrown into the blood stream toxic agents, which, when surrounding nerve elements, interfere with their nutrition and thus give rise to expressions of pain in the form of headache. In that form of headache known as nervous or sick headache, hemicrania or migraine, considerable diversity of opinion exists as to its pathology. Some have considered it dependent upon gastric and hepatic derangement, others that it is essentially neuralgic, but doubtless the causation

which has the most followers lies in the belief that it is due to an affection of the sympathetic nervous system. If, through emotion, fatigue, bodily or mental, or any depressing cause, the nervous tone of the body be lowered, and hence the regulating power of the cerebro-spinal over the sympathetic impaired, then irritation of some portion of the latter takes place, causing contraction of the blood-vessels and producing the sensation which usually precede the headache. This excitement is followed by exhaustion of the sympathetic, dilatation of the vessels and headache.

If this be the true solution of its origin the avoidance of irregular habits of life and adoption of proper hygienic, dietary and physical exercise routine should so fortify the bankrupt nervous system as to make its removal easy. It is a truth that most cases of migraine get well or improve beyond middle life, possibly explained by the fact that at that time of life the sufferer begins to understand better how to live. It is true, we have learned the lesson late in life how to take care of ourselves, and thus our internal resistance, so to speak, to infective processes, disturbing reflexes and toxemias is fortified. Eliminating headaches due to structural intracranial diseases, those of acute febrile and inflammatory processes, the vast majority of the balance are practically poison and starvation cases; by this I mean that the general neurotic condition underlying most of these cases is brought about by intemperance in living, underfeeding or overfeeding, thereby interfering with proper digestion in the gastro-intestinal tract, fermentation and decomposition toxins and ptomaines being absorbed into the blood stream, the proper metabolism of the tissues being interfered with, assimilation and elimination being retarded, thereby producing that fertile soil so productive of that ever-increasing body of unfortunates labelled neurasthenics, with their headaches and protean discomforts.

As convincing evidence of these facts, who has not seen the uremic headache of Bright's disease much ameliorated or altogether relieved by proper dietary measures, also those of the uric acid diathesis

disappear by the interdiction of certain articles of diet, viz., starch? I am quite sure I have seen many cases of habitual headaches permanently relieved by abstinence from all forms of mush and porridge.

That auto-intoxication, acting upon a predisposed organism, creates a susceptibility to reflex impressions, due to anomalous conditions of the eye, nose, teeth, stomach or pelvic organs, there is no doubt. My experience with headaches pertains largely to those dependent upon troubles of the special senses, yet I have had invaluable experience from a close study of those headaches which, on elimination of the special senses as the prime cause, proved to have their origin in other causes. As stated above, I believe a large number of headaches begin from some anomalous condition of the eye, nose, teeth, or are of peripheral origin, yet this is not the essence of their beginning. The state of the general nervous system must be considered.

Certain acute suppurations in the nasal sinuses, or acute inflammations of the eye, as iritis and cyclitis, will necessarily cause headaches, but many chronic inflammatory affections of the eye or errors in refraction only give rise to headaches in some and not in all, much depending upon the condition of the subject's nervous system. Take a well-nourished, in every respect normal, individual, and rarely do we find an error of refraction give rise to headache. The same prevails with subjects having nasal deformities, the subjects of such having rarely any reflex phenomena, as headaches, if in normal health; but if for one reason or another any impairment of the general nervous tone be manifested in subjects having abnormalities or obstructive lesions in the nose severe and persistent headaches are a consequence until relief by operative intervention is afforded.

On noting the close anatomical and physiological relations of the nose to adjacent structures, through the medium of the nerve and blood supply, there can be no surprise that the headache, in many cases, can be traced to some derangement of the nose or its sinuses, the pathological conditions giving rise to pres-

sure, atrophy or inflammation of the accessory cavities.

Headaches due to pressure arise from hypertrophic rhinitis, deflected septum, nasal spurs, tumors, including polypi, fibroma, sarcomata, foreign bodies, rhinoliths, parasites and purulent processes in the accessory cavities, e. g., frontal sinus, antrum of Highmore, ethmoidal and sphenoidal cells.

The atrophic conditions do not give rise to headaches so frequently as the hypertrophic conditions, but may be due largely to impaired respiration, the air entering the lungs insufficiently warmed and moistened; as a consequence such patients are anemic, enfeebled and badly nourished, all of which may give rise to disagreeable head pains.

Headaches of nasal origin usually begin intermittently; an attack of cold or undue excitement increases the severity and frequency of the pains. When the nasal stenosis becomes complete the pain is continuous. In a dry atmosphere the exacerbations cease, to recur with increased humidity and turgescence of the tissues. These cases are liable to be mistaken for malarial pains. The pain may be referred to the brow, temples, eyes or scalp. The general health of the patient suffers, inability to sleep supervenes, fretfulness, peevishness and irritability follow, mental vigor and memory become impaired and melancholia may follow.

Complicating the nasal disease, we may have a catarrh of the pharynx, larynx and bronchial tubes, cough, dry throat, and muco-purulent expectoration results.

The obstructed nasal passages makes mouth-breathing imperative; hence a foul-coated tongue is noted, and this may suggest to the careless observer that dyspepsia is the cause, and treatment so directed would be misplaced. A foul tongue in a mouth-breather more frequently indicates nasal obstruction than dyspepsia.

Acute inflammation of the nasal passages gives rise to more severe headaches than do chronic. With a history of catarrhal symptoms and long-continued pain the diagnosis of headache from nasal obstruction is easily verified by inspection with the nasal speculum and by cocaineization, which gives temporary relief

from the headache if due to obstruction. Manipulation over sensitive areas, the extremities and center of the inferior turbinates, may increase the pain, yet with these aids pain may persist, and a positive proof that the condition is not due to the nasal condition can only be had after treatment. Several instances of persistent, irregular, one-sided headache, not yielding to ocular, nasal or general therapeutics, I have seen relieved only after referring to a dentist who removed or plugged carious teeth.

That the eyes are a frequent source of headache every ophthalmologist will agree. That the eyes are the prime cause in all cases I cannot assent to. As stated before, there is an underlying depravity in the general nerve tone which cannot assert itself under certain refractive and muscular anomalies.

That there are headaches induced by eye-strain is undeniable, but rarely in a well-nourished, normally healthy individual. Certain general conditions usually underlie the development of headache, and the ocular condition may be only a factor, yet it may play the predominant role in the case. If after relief from pain by the correction of the eye condition a recurrence of the head pains takes place this does not make the treatment valueless, but simply shows that some of the other underlying factors had become dominant. Such cases show the importance of a careful correction of the ocular condition where the etiology of the headache is in doubt.

Investigators have shown, among civilized races, the percentage of abnormal defective eyes to be 75 to 90 per cent. Taking a series of 400 cases of errors of refraction from my record book I find that of that number from 50 to 60 per cent. complain of headache, more or less, and the exciting cause to be eye-strain. It has been my habit, in examining patients with errors of refraction, to ask about eyeaches or head pains before the use of glasses, and, after correction, to ask the patient to return in a short time—a few weeks—and tell me whether he had been relieved. From those who did so report I find that about 60 to 75 per cent. were relieved; the balance not at all

or partially so. This alone, to say nothing about the improvement in vision through proper adjustment of glasses, is a great boon to humanity and proves the utility of a conscientious ocular examination under a mydriatic in most cases. In patients complaining of eye and head pains following the use of their eyes, or even when the pain does not follow the use of the eyes, but is ever present, our everyday experience teaches us that severe, excruciating occipital, frontal or vertical headaches, without reference to the use of the eyes, are frequently relieved by wearing appropriate glasses. The statement by the patient that he has perfect vision need not prevent a thorough examination, as thereby a latent hypermetropia revealed by the use of a mydriatic may be shown, and, when corrected, give relief.

One cannot be sure that no ocular defect exists because pain does not show itself with or immediately after the use of them. Where no ocular defect can be found, many times we will find the headache due to a hypersensitiveness of the retina from bright lights, particularly the electric light. Strain of accommodation in hypermetropia or astigmatism is the most frequent cause. The extrinsic muscles may not act harmoniously, and are frequently either alone or associated with refractive error, the cause of the worrying reflexes.

In our diagnosis of ocular headache we must take into consideration the time and location of the pains. The localization is difficult. In a general way we may say that ocular headaches are of a dull, heavy nature yet may be sharp and severe. The most frequent seat is the frontal region, causing browache or referred to the back of the eyes; next in the temporal region, of a throbbing character; occipital headaches, radiating to the nape of the neck, base of the skull or reflected down the shoulders and back. Vertex pains are least common. Occipital and vertex pains, in my experience, point to muscular insufficiencies, functional or organic. The most characteristic time of occurrence is with or after the excessive use of the eyes, as in book-work, shopping, sightseeing, etc., but there are exceptions, as noted before.

The headache may exist on arising in the morning, and be due to an error of refraction. Migraine of ocular origin I believe to be true, but the majority of these are not amenable to ocular treatment. It has been my observation that those cases yielding to ocular correction are usually one-sided constantly, and the defect in the eye is most marked on that side and an astigmatic anomaly.

Treatment.—Where headache is dependent upon structural intracranial trouble, or due to acute inflammatory or febrile infectious diseases, the treatment will be adapted towards the recognized disturbing factor. But it is to the treatment of that large, mysterious class of headaches obscure in origin that I wish to especially refer to. As stated, in this class of cases of headache I think we usually find a lowered condition of nutrition, and while the local conditions—the eye, nose, ear, teeth and pelvic organs—require attention, it is extremely important to keep the general health up to the very highest point of excellence by the use of pure, nutritious food, outdoor life as far as possible and surround the patient with the best of sanitary and hygienic measures. Treat the patient as you would a race-horse if you wanted him to win the race. Keep the patient in that condition constantly, and I am sure the possibility of headaches will be reduced, or, at least, their severity much ameliorated. I am quite sure these principles, vigorously followed out, have, in the hands of many of you, been efficient in banishing or materially lessening the head pains attendant upon the more chronic conditions, as Bright's disease, diabetes, epilepsy, rheumatism, gout, malaria, dyspepsia and so-called biliousness—gastro-intestinal indigestion. Our bodies are made up of what we eat and drink—it is not what we swallow, but what we digest and assimilate—and our happiness and health depend largely upon the proper selection of our food, and by that selection our health is made or marred; hence it behooves us as rational beings to make a minute study of the subject in order that we may attain the perfection of physical vigor and intellectual force, for a man succeeds or fails in the many struggles of life in propor-

tion to his mental clearness. As man improves in his dietetic habits he will advance mentally, morally and physically.

When we consider how systematically man abuses his stomach by eating and drinking we must admit that we are great sinners against the laws of health. Mankind must be neither overfed or underfed in order to preserve that happy medium which goes for the most perfect condition of health; in fact, a carefully regulated diet has, in hosts of cases, proven one of the best, if not the very best, corrective of disease, headaches included. Given, by birthright, a clean, vigorous constitution, and then surrounded by the most sanitary influences, man should consider it a disgrace to be sick, and would live to the fullness of his intended years; but this is too idealistic for our intemperate age.

To secure the best possible results to the human race the regulation of diet, hygiene, etc., should begin with the parents before the child is born, so that the largest possibility for a strong child at birth will be the result. From birth on the diet should be carefully regulated, keeping in mind the proportionate amount of the various foodstuffs necessary for the proper maintenance of growth, heat and energy. To do this we must comprehend fully the chemical composition of all the foodstuffs, their digestive possibilities and the methods by which they are used by the animal economy.

The same rigorous dietary should be maintained through the developmental and adult period of life. The diet should be composed chiefly of eggs, milk, meats of all kinds, excluding much pork in any form, and veal. Under meats I include game, poultry and fish; with this bread and butter and a limited amount of vegetables, rice, macaroni, string beans, spinach, lettuce and peas being the least damaging. Many other vegetables are and can be used, but should be used sparingly. Potatoes (white, never sweet) should be used sparingly, if at all. Fruits, recommended for their highly laxative and nutritive qualities, should be cooked. The excessive use of fruits is one of the chief errors that has befallen humanity in connection with the errors of diet. Fruits

are laxative, but largely so due to the excessive fermentation that they produce in the alimentary canal, and not, as is usually believed, to a natural stimulation of an increased flow of bile and an increased production of glycerine and soap in the alimentary canal. By following strictly these simple dietary measures and avoiding all fried forms of food, sweets, pastries, cakes, hot breads, buckwheat cakes and molasses, the best type of nutrition will be developed and sustained; the individual will easily ward off disease and possibly headaches. A neglect of these strict dietary rules will sooner or later be followed by disaster and headaches. When it comes to treating the absolutely afflicted—with headaches dependent upon disturbed nutrition—then the diet must be rendered still simpler and easier of digestion. Each case will suggest its appropriate dietary. These, I take it, are the elementary principles involved in the treatment of nineteenth-century headaches.

I have said nothing of the medicinal aspect. I am not a therapeutic nihilist, but do not give precedence to drug administration for the cure or alleviation of disordered conditions due to intemperance in living. Let us first correct these by timely and judicious advice as to correct dietary exercise and habits of life in general, then call in our aids in the form of medicinal measures which will aid nature to battle with the ravages of the underlying cause. Who would not give mercury and the iodides in syphilitic headaches? Who would not give quinine and arsenic in malarial headaches? Who would not give iron, arsenic and strychnine in anemic or chlorotic headaches? Who would not give the salicylates and alkalis in the rheumatic or gouty headache? Who would not give plenty of water and the diuretics in uremic headaches? Who would not, in conjunction with proper dietary, give digestive aids—the digestive ferments, hydrochloric acid, nux vomica, purgatives, etc.—in the so-called stomach and liver headaches? Who would omit to specifically mention the daily routine—the specific articles for supper, breakfast and dinner, the amount of alcoholics (if any), the amount of tobacco (if any), the

amount of exercise, the amount of tea and coffee, the amount of physical and mental work—in one and all of the above diseases? Many.

I think, then, if we will combine with our medicinal agents, in the same prescription, the proper amount and quality of food, exercise, sunlight, fresh air, recreation, mental and physical work, we will offer the majority of our poor headache sufferers a something that will forever give them relief, and the balance we will refer to the oculist, rhinologist, dentist, aurist and gynecologist, for each can add something by way of surgical or mechanical intervention to the above prescription to be of needed service in banishing many of the headaches not amenable to sanitary and medicinal means.

The treatment of nasal headaches is the cure of the causal condition in the nose. Hypertrophies and growths must be removed by snare, saw, cautery or trephine; congestion relieved by cautery or medicinal agents, as alkaline sprays and camphor menthol in some petroleum oil; atrophic conditions relieved by cleanliness and stimulants, and suppurations in the accessory cavities emptied by surgical measures.

The anomalies of the eyes must be corrected. Hypermetropia, astigmatism, presbyopia and myopia corrected by suitable adjustment of glasses under a mydriatic in most cases. Muscular insufficiencies relieved by suitable exercise with prisms or by tenotomies. These combined forces would leave but little room for the lucrative operation of that preying horde of charlatans and impostors who offer their headache powders and potions and catarrh cures to an afflicted public, except to administer to our failures—few indeed, if we can ever arrive at that ideal treatment which I have tried to outline.

OIL OF GAULTHERIA IN CHOREA.—Luigi reports in the British Medical Journal the use of oil of gaultheria, either pure or mixed with vaseline, and applied to the upper limbs and lower limbs. It was also given internally. This was often successful when the other salicylates were not well tolerated.

TWO CASES OF CHRONIC DIARRHEA DUE TO ULCER OF THE UPPER RECTUM.

By J. M. Hundley, M.D.,

Clinical Professor of Diseases of Women, University of Maryland.

READ BEFORE THE CLINICAL SOCIETY OF MARYLAND,
MARCH 3, 1899.

ABOUT two years ago Mrs. D., thirty years old, consulted me relative to a diarrhea she had had for about a year. She also had a retroverted uterus, and for some reason had come to believe that her diarrhea was due to the misplaced organ. She said she felt a constant pressure on the lower bowel; the pressure and discomfort she thought came from the womb resting on the bowel. The displacement had been corrected for a short time by wearing a pessary. Correction of the misplacement exerted no beneficial influence on the diarrhea, and as the pessary gave her pain she had it removed.

In getting her history I found she had had prior to the diarrhea a dysentery. I immediately caught hold of that point in her history and kept it in view while searching further for a probable cause of the diarrhea. She had taken various remedies by the mouth for her diarrhea, and also had resorted to starch-water and laudanum, enemas, with no lasting benefit. Pain was experienced about the umbilical region as well as low down in the pelvis just before each bowel movement. She had gotten down to quite a rigid diet, as almost everything she ate seemed to increase the frequency of the bowel movements.

After going over her history carefully, besides making a vaginal examination, I concluded that the cause of the diarrhea must be sought for in her bowel. She was put in the knee-breast position, her corsets and clothing having been previously loosened, and a cylindrical speculum introduced into the rectum as far as the sigmoid. With an electric headlight it was now an easy matter to inspect the rectum. I found the mucous membrane of the entire rectum very red and in places denuded of its epithelium.

Just this side of the sigmoid I found a well-defined ulcer. There was an abundance of tenacious mucus, which had to be removed before a thorough inspection could be made. At this examination I applied a 10 per cent. solution of nitrate of silver to the mucous membrane, beginning at the sigmoid and ending at the external sphincter. Six applications were made. The intervals between the applications varied from three to four days to a week. She was greatly benefited, whether permanently or not I cannot say, as she has not been heard from since the last application.

Case 2.—Mrs. X., thirty-two years old, married, consulted me January, 1898, one year ago, concerning a diarrhea she had had for four years. About four years prior to her visit to me she had had dysentery, and since then has had loose bowels. Her diarrhea was worse in summer than winter. She has been unable to eat but sparingly of vegetables and fruits during the entire four years. Her diet consisted principally of milk and bread, with some little meat and an occasional simple dessert.

In spite of this restricted diet her bowels moved three and four times a day unless restrained by opium in some form. After each movement of her bowels she was greatly prostrated and had to lie down for a time. The pain, as in the other case reported, was in the umbilical region and low down in the pelvis, more frequently low down. In this case there was tenesmus, which varied in severity, one time slight, at another time severe. She was anemic and somewhat emaciated and practically an invalid. Rarely a day passed without the necessity arising for the use of some preparation of opium either by mouth or rectum. Exercise, even moderately, seemed to increase the number of bowel movements. Aside from this bowel trouble she was free from disease.

From the history of the case and the ill-success attending the treatment of her diarrhea by the usual methods I advised inspection of the rectum. On the 19th of January, 1898, the first examination was made. The same method was used as in the case just reported. On inspection

about two inches of the upper rectum next to the sigmoid was found to be very red, denuded of its epithelium and with blood exuding from numerous little pore-like openings on the surface of the mucous membrane. In this area just described three superficial ulcers were seen. This inflamed area stopped short of the sigmoid.

In the treatment of this case a 10 per cent. solution of nitrate of silver was used, applied directly to the inflamed surface. In addition, in the beginning of the treatment only, 10-grain doses of subgalate of bismuth were given three times a day. At the end of two months the diarrhea had ceased, the rectal inflammation had disappeared and the patient expressed herself as feeling perfectly well. She has had no return of the diarrhea up to this time and has no occasion to restrict her diet.

Society Reports.

THE JOHNS HOPKINS MEDICAL SOCIETY.

MEETING HELD MONDAY, FEBRUARY 20, 1899.

EXHIBITION OF SURGICAL CASES.

DR. CUSHING: 1. *The Radical Cure of Hernia under Cocaine Anesthesia.*—Dr. Cushing said that out of perhaps 125 hernias operated upon during the past fifteen months seventeen had been done by means of local anesthesia. Where a general anesthetic could be safely administered for various reasons it was easier for both patient and operator.

The patient exhibited was a type of the case in which a local anesthetic had been used. He was a man seventy-four years of age and had had an uncontrollable double hernia of large size for years. He said that the relief afforded men advanced in years by such an operation was very great; they were able to lead a much more active life, and the greatest advantage gained from the operation being the relief to the bowels, as constipation is a very marked feature of a large hernia in old men.

2. *Splenectomy for Primary Splenic Anemia.*—Dr. Cushing said that recently two rare cases had been admitted into

Dr. Osler's ward. In both there was a pronounced degree of anemia; both had a history of attacks of profuse hematemesis and a markedly enlarged spleen. The first of these cases was transferred to the surgical side after a diagnosis of gastric ulcer had been made. It was suspected that the hemorrhage might be associated with his splenic enlargement, and it was determined to remove the patient's spleen should no primary gastric lesion be discovered. Laparotomy was performed through the right rectus muscle, no lesion whatever being found in the stomach, the spleen being fairly free from adhesions. A long oblique incision was made, and an effort to free the spleen met with serious bleeding. The splenic artery and vein were isolated and divided between two ligatures, and the organ was freely delivered from its bed. The patient made a good recovery; he has gained thirty pounds in weight and had no further hemorrhages.

3. *A Case of Jejunal Fistula.*—This case was one with a good many points of physiological interest. The patient was admitted to the hospital several months ago greatly emaciated, weighing but ninety-three pounds. In the median line was a fistula which constantly discharged an irritating fluid, which had produced an acute dermatitis, extending from the costal margin almost to his knees. The patient's mental condition, due possibly to the state of chronic starvation, was unbalanced, and he had several epileptiform convulsions during his first days in the hospital, and gave a history of similar attacks during the past few years. The fistula was said to be the result of a razor cut across the abdomen received ten years previously, which had completely severed the intestine in one place and had opened it in two others. He was placed in a continuous bath and was fed with nutritive enemata, attempts to feed through the fistula being unsuccessful. The condition of the skin under the bath improved rapidly, and he began to gain in weight under rectal feeding. Several months later he was operated upon. The fistula was closed by a resection of the bowel and end to end suture, and the patient has made an uneventful recovery.

His weight, 180 pounds, is now almost double that at entrance.

Dr. Cushing said that the fistula was evidently high up, as was evinced by the irritation produced upon the skin by the discharge. He said attempts had been made to find the exact situation of this fistula, one being suggested by the accidental discovery that oysters would be discharged from the fistula a few hours after ingestion practically unchanged. A piece of silk was tied around one of these before it was swallowed, and three hours later the oyster appeared at the fistula with just three feet and eleven inches of string from the patient's teeth to the fistula. Peristalsis was so strong and tugged at the string so vigorously that the patient had tied it to a pencil which he carried between his teeth to prevent its disappearance. This measurement showed the fistula to be high in the jejunum, possibly a foot below the duodenum. Examination of the stomach showed that there was no dilatation, despite the extraordinary amount of food, solid and liquid, which the patient took at frequent intervals.

Dr. Cullen: I would like to ask Dr. Cushing the routine method and the steps he pursued in the removal of the spleen, and why it is that patients, in so many cases, die within a few hours of hemorrhage after removing the spleen.

Dr. Cushing: It was impossible to remove this spleen as ordinarily advocated. It could not have been delivered through the wound, because the adhesions to the diaphragm were too dense. The vessels were ligated before the spleen was removed. There was a good deal of hemorrhage. These cases are predisposed to hemorrhage, but whether the anemia favors hemorrhage I cannot tell. The cases that have been operated upon for pure leukemia have all terminated fatally from hemorrhage; the other kinds are less apt to do so. This is the only case of the kind that I know of.

FURTHER USES OF THE URETERAL CATHETER.

Dr. Kelly said that it seemed some months ago that certain discoveries would limit very much the use of the

renal and ureteral catheter. It was found to be possible to separate the urines and retain them separated in the bladder until discharged from that organ by tubes. This was done by means of an instrument which consisted of a tube with a solid septum running down the center and projecting beyond the end of the glass tube, so that urine running down from one ureter remained on its own side of the septum, while that from the other ureter was confined to the opposite side. This method was published in the *Deutsche Medicinische Wochenschrift* of October, 1898, and not long after Dr. Harris of Chicago was able, by the use of an instrument, to form two little pockets in the bladder for the accumulation of the urines from each side, which could then be drawn off by a suitable catheter. At first it looked as if these methods might limit very much the further use of the high catheter, but a new and very important use for them has developed.

In a certain number of cases we have to deal with vague but depressing pains in the side, particularly the right, and one is long in doubt as to whether they are renal, hepatic or intestinal in character, or whether they are really hysterical. He has been able to include or exclude the kidney as a causative factor by the use of the catheter. When the ureteral catheter presses upon the pelvis of the kidney the patient will sometimes say that that is the very point where she had the pain. Further than that, he has been able to produce an attack of artificial renal colic by injecting a solution of boracic acid into the kidney through the catheter.

Dr. Kelly then referred to a recent case which illustrates well the value of the catheter. The condition was so like a floating kidney that he unhesitatingly made that diagnosis, but passed in a catheter first and produced an attack of colic, which the patient did not locate in the lump which was felt in front, but insisted that it was in the back. At the operation he found an enlarged gall bladder in front of the kidney, which was in its normal position, so that the location of the pain by the patient outside of the kidney when artificial colic was produced was correct.

Dr. Welch: I would like to ask Dr. Kelly whether he has ever observed that infection had been carried from the bladder into the kidney as the result of catheterization.

Dr. Kelly: I have never seen an infection introduced from the lower into the higher urinal tract by catheterization of the ureters.

THROMBOSIS OF VEINS OF THE NECK AND ARM IN A CASE OF CARDIAC DISEASE.

Dr. Welch: The patient was a young colored woman, seventeen years of age, admitted to the hospital November 26, 1898, and who died January 16, 1899. She gave a history of acute articular rheumatism, followed by a cardiac affection, which, during life, was recognized as affecting both the mitral and aortic valves. There was displacement of the apex beat, great increase in the area of cardiac dullness and accentuation of the second pulmonary sound. There was marked pulsation over the heart and especially in the neck and over the upper part of the clavicle and sternum. She had the usual signs of insufficiency, and at the autopsy the following condition was found: There was very great hypertrophy and dilatation of the heart, especially of the left side; the aortic valve was thickened and retracted; the mitral valve was likewise thickened and its orifice much widened. There were the usual signs of passive congestion of the viscera. There was edema of the lower extremities and some increase of serum in the serous cavities. The point of special interest was the thrombosis. Before the body was opened there was noticed an edematous swelling of the left arm, chiefly in the neighborhood of the elbow. This swelling had been noticed during the last day or two of life. The left innominate, left jugular, external and internal and left axillary veins were all involved. It was a mixed thrombosis.

Dr. Welch stated that the main points of interest in the case were (1) the association of peripheral thromboses with heart disease, (2) the location of the thrombosis in the veins of the upper extremities, and (3) the causation of the thrombosis. A careful bacteriological examination was made of the thrombosis

and a pure culture of the streptococcus pyogenes was obtained.

Dr. Futcher said this was one of the most interesting heart cases seen in the hospital for a long time. The patient came in with very marked dyspnea and some edema. On examination of the heart the condition of cardiac dullness was found to extend far out into the sixth interspace. There was very marked precordial bulging, with at times a diastolic retraction. There was a very marked dynamic pulsation of the vessels of the neck and a typical Corrigan's pulse. There was definite evidence of aortic insufficiency and possibly also of a lesion of the mitral valve. Broadbent's sign in the back was very distinct, and that in connection with the other symptoms made it very probable that there was also an adherent pericarditis. The evidences of thrombosis of the veins in the arm and neck appeared about two days before death.

EXHIBITION OF SPECIMENS.

Dr. Cullen: 1. *Carcinoma of the Ovaries.*—Dr. Cullen exhibited two large ovarian tumors which examination had shown to be carcinomatous. The patient had been in a poor condition before the operation, her pulse being 140 and temperature 103°, but immediately after the operation she seemed very much improved. On the eighth day, however, she complained of sudden pain in the left shoulder, and within a few minutes the veins of the arm showed the presence of a thrombus. It was feared that gangrene and sloughing of the arm might follow, as it was swollen to four times the size of the other arm. She greatly improved, however, and is now about to leave the hospital.

2. *Fecal Concretion.*—This patient had had no movement of the bowels for nine days, and at the end of that time was vomiting fecal matter. At the operation the small intestine was found much distended, and down in the pelvis was found a hard nodule, which, on elevating the intestine, proved to be a concretion within its lumen. It was situated about the middle of the small intestine and had completely blocked its lumen, so that gangrene was commencing. The patient died within twenty-four hours.

MARYLAND OPHTHALMOLOGICAL AND OTOLOGICAL SOCIETY.

MEETING HELD THURSDAY, FEBRUARY 23, 1899.

THE meeting was called to order by the president, Dr. Aaron Friedenwald.

Dr. A. D. McConachie exhibited a case of "Double Retinal Detachment." The patient was a young colored man, about nineteen years of age, an elevator runner, and about two weeks ago suddenly discovered that he could not see, his vision up to that time, according to his own statement, being perfectly good. On inspection, without a mydriatic, it was found that he apparently had floating bodies in each vitreus. On dilatation with a mydriatic the question arose as to whether he had detachment in both eyes or keratitis, with much exudate of the vitreus. He was put under more thorough mydriasis, and it was plainly shown that he had a double detachment of the retina, possibly peripheral in both eyes. *Dr. McConachie* thought this case might be of interest to the society, as he considered it quite unusual to see a double detachment occurring in a person so young.

Dr. McConachie then read a paper entitled "Headaches: Their Causes and Treatment, with Special Reference to Nasal and Ocular Headaches" (see page 133).

Dr. George J. Preston said he was afraid if we were to follow the very wise dietary restrictions proposed by *Dr. McConachie* the average human being would keep his buckwheat cakes and molasses and keep his headache. He says there is perhaps no one symptom that requires the same amount of dietetic work on the part of the ophthalmologist and neurologist as does headache, and that when we come to look at the true physiological and pathological conditions of headache it is really a very puzzling question. We may have headaches due to certain conditions of the scalp itself, to the skin or the muscles; for example, the headache that *Ruskin* alluded to as "gallery headache," which was brought on by looking at the pictures in the Royal Art Gallery, due partly to the vileness of the pictures and partly to the muscles of the persons look-

ing at them. Then we may also have headaches due to certain diseased conditions of the aponeurosis itself.

Dr. Preston, in speaking of the intracranial cause of headache, said it is a rather doubtful matter whether the brain is sensitive in the way the term is ordinarily applied; certainly the inflamed brain is sensitive. There is no doubt that the dura mater is highly sensitive; the pia mater and arachnoid are only sensitive under inflammatory conditions. Then, of course, we have to take into consideration the cranial nerves, the fifth and upper cervical nerves being the important ones concerned in headache. When we come to classify, etiologically, headaches it is extremely difficult. Leaving out traumatism, which undoubtedly is quite frequently the cause of head pains, we are obliged to think of headaches caused either by vascular disturbances, by new growths in the brain somewhere, or within the cranium, by certain general or toxic conditions or certain reflexes, particularly reflexes connected with the special senses. Vascular disturbances are undoubtedly responsible for the large proportion of ordinary headaches, particularly the transient head pains. The congestive headache has been supposed to be due to what is spoken of by many modern writers as a "colic of the artery," a rather curious term to apply, but one which the English writers are fond of using, and supposed to be due to the fact that the artery is constricted peripherally, and the blood coming behind distends the artery behind the peripheral constriction, the pain being due to the nerves of the vessel itself. He said this was an exceedingly difficult headache to get rid of, and that perhaps the old custom of blood-letting was a good form of treatment, as the modern treatment had been far from successful in his hands.

Dr. Preston said he had become to some extent a convert of *Haig*, although he thinks latterly *Haig* has gone too far in his uric-acid theory, but unquestionably a great deal of the headache which we think of as due to imperfect metabolism is due to what *Haig* calls "uric acidemia," or an excess of uric acid in the blood. Another form of headache he

spoke of particularly was that due to the overuse of coffee and tea. He says it is rather striking to see the amount of tea and coffee that is consumed with the idea that they are perfectly harmless.

A continuous headache, he says, is usually due either to some intracranial trouble or to some form of chronic disease. The headache of brain tumor is characterized by its being continuous; it may at times be intense; it may have exacerbations which are intense; but the characteristic feature of the pain from brain tumor is that it is constant. It may be less or greater now and then, but it never absolutely leaves the patient. It is not distinctly localized. He says he has seen frontal headache from a tumor situated in the cerebellum, and occipital headache from a frontal tumor; so that one cannot absolutely localize a tumor by the position of the headache. He says he has been struck with the fact that head pains in the cerebellar tumors are apt to pass down the neck.

In referring to neurasthenias and hysterias, he says it is extremely difficult to explain the cause of headaches in such cases. We are apt to have more or less gastric disturbances, though this is not necessarily the case, as we have cases with very little gastric disturbance, but one should hardly diagnose a case as neurasthenia without the presence of the characteristic headache, which may be in various parts of the head, but which are always down the neck. In hysteria the most characteristic head pains are those of diffuse, uncertain, irregular character, which spread over the head, first on one side and then on the other.

Dr. Preston says he does not know of any one symptom that requires more patient, careful work than that of headache, but one is apt to be rewarded, because, fortunately, except in a few cases of brain tumor or nephritis, when one does discover the cause, that cause can be removed.

Dr. John N. Mackenzie said that the head pains of various kinds which are associated with sinus disease are generally referable to some one of the branches of the fifth nerve, and are usually located, not at the seat of the disease, but at some

point remote from the origin of the disease. Their localization, therefore, is a very difficult matter. Generally speaking, they may be produced in one of three ways—either by pressure of the exudate in the cells, for example the ethmoid cells; or, from sagging, so to speak, of the inflamed membrane, or they may be the result of pure neuritis. These pains, of course, are not absolutely characteristic of sinus disease. They derive much of their importance from the fact that in many instances they are the solitary symptoms, as far as the patient observes. He spoke of one case in which these periodic pains lasted for a period of eighteen years without the cause being detected. The individual had never had her attention sufficiently called to her nose to notice a very slight discharge which was found upon examination. These pains may be divided and thrown into two groups, speaking broadly—pure headache, or dull, oppressive pains in the head, or another group comprising pains of a boring, rasping nature that occur all over the skull or its individual parts. They are also often associated with sleeplessness, incapacity for mental labor and many other phenomena. He said that we have many cases recorded in which certain mental states have been relieved after the removal of obstructive intranasal lesions.

In cases of obstruction of the orifices of the accessory sinuses, of which the pains above mentioned are the solitary symptoms, we possess a method of determining the diagnosis with considerable accuracy by means of the Politzer method of inflating the middle ear, and by the same means these pains can literally be blown away, so that the method can be utilized both in diagnosis and in treatment. As this is the solitary method of determining the cause of these pains, so it is the only way of causing their destruction. If we contract the tissues by means of cocaine we will gain a more ready access to the sinus. He says that it is generally his custom in cases in which cocaine is not contraindicated to contract the erectile tissues with cocaine as a preliminary to the Politzerization.

Dr. Mackenzie said there is another kind of pain which is associated with sinus

disease, and especially chronic empyema, and that is a dull pain which may be referred to almost any part of the cranium, but is generally referred to some area between the eyes and along the bridge of the nose, which is not in itself characteristic, but which in doubtful cases, when we are in the dark concerning the etiology of the headache, should always lead us to examine the sinuses. This pain is almost always relieved after the patient gets rid of a quantity of the muco-pus from the nose. It is sometimes continuous and sometimes not so; it seems its continuousness depends upon the amount of fluid in the cells; when that is excessive we have the pain; when the cells are evacuated, either naturally by the patient or by artificial means, the pain either diminishes in severity or ceases altogether. It is sometimes possible to locate these pains by means of a probe, and especially in cases of ethmoiditis. It is sometimes possible when the pain is absent to reproduce it, or when present to greatly exaggerate it by irritation of various parts with the probe. If we find that pressure with the probe at any one given point, for instance the ethmoid region, gives rise to pain at any one particular point we can pretty nearly be sure that that is the primary seat of the disease, or, if not the primary, the one most affected.

Dr. Mackenzie said that this whole subject of the relation of nasal disorders to headache and mental states is a most interesting one.

Dr. Samuel Theobald reported "A Case of Atrophy of the Optic Nerve Caused by a Fall from a Bicycle."

Obituary.

CHARLES F. TAYLOR, A.M., M.D.

In the death of Dr. Taylor the profession has lost one of the foremost orthopedic surgeons in this country. He was the founder of numerous methods in this specialty which are recognized as the best, not only in this country, but abroad, and was probably one of the foremost inventive surgeons living. To his pioneer work is largely due the dignified and important position which orthopedic sur-

gery assumes today. He was one of the incorporators of the American Orthopedic Association, and at the time of his death was an honorary fellow of that body.

Dr. Taylor, in 1866, while active in his specialty, called the attention of the public to the need of a place where the crippled poor of New York could receive treatment. His energy and great tenacity of purpose, together with the aid and co-operation given by Howard Potter, James Brown, Governor Roosevelt's father and others, led to the foundation of the New York Orthopedic Dispensary



and Hospital, now at 126 East Fifty-ninth street. The first home of the institution was nothing more than a room in a building between Thirty-fifth and Thirty-sixth streets on Broadway. About 1873 the institution moved into its present quarters, which were built especially for its needs. When Dr. Taylor resigned as active surgeon the present incumbent, Dr. Newton M. Shaffer, was chosen as his successor.

Besides his identification with the New York Orthopedic Hospital, Dr. Taylor was for a number of years orthopedic surgeon to St. Luke's Hospital.

Perhaps to the profession at large Dr. Taylor is best known from the association of his name with the back brace and head support for the treatment of Pott's disease, the traction splint for coxalgia and the club-foot brace for use after operative correction. He possessed to a marked degree great ingenuity and intelligent dexterity, not adapting the deformity to a special brace or treatment, but the reverse. He had no sympathy, as shown frequently in his writings, for the application of braces, splints, etc., by those ignorant of the anatomy, pathology and mechanism of the joints, and his detailed and painstaking care explain to a certain extent his wonderful record of cured cases.

His writings, chiefly on orthopedic subjects, comprise some fifty books and monographs, many of which are almost classics, especially on the mechanical treatment of Pott's disease and coxalgia.

Dr. Taylor was the son of a farmer, and was born at Williston, Vt., April 25, 1827. He was educated in the schools of his native town, and was graduated in 1856 from the medical department of the University of Vermont. After a few years of general practice he interested himself in the treatment of deformities. During a visit to London he paid much attention to the treatment termed the Swedish movement, as practiced by the elder Dr. Roth, who was a pupil of Dr. Peter Henry Ling of Sweden. Dr. Taylor was probably the first person to use Swedish movements in this country. He received medals and diplomas for original exhibits at the Paris Exposition in 1867, at Vienna in 1873 and the Centennial Exhibition in Philadelphia in 1876.

For the past fifteen years he has been an invalid and retired from active practice, spending most of his time in California, where he died on January 25 at Los Angeles of influenza.

His unusual success in treatment and teaching served as a stimulus to the work of his many followers, who will always owe an allegiance to a leader who so often made by his example the path of uncertainty a way to a satisfactory result.

Medical Progress.

BLAUD'S PILLS.—The principal ingredient of Blaud's pills is ferrous carbonate, which is called Vallet's mass. Blaud's pills contain also potassium carbonate, together with acacia, water and syrup. The mass is to be mixed carefully. Joseph W. England, Ph.G., the chief druggist to the Philadelphia Hospital, suggests in the Philadelphia Medical Journal the following modification of the pills of ferrous carbonate. He says:

"Some years ago I devised for use in the Philadelphia Hospital a formula for Blaud's pills that has been found most satisfactory. Taking advantage of the fact that the official mass of ferrous carbonate—containing about 42 per cent. of iron-salt—of good quality is always available, this was used in place of the ferrous sulphate, and the by-products of the reaction—potassium sulphate and potassium carbonate—were directly added. The relative proportions were decreased somewhat, so as to permit a more gradual increase of dose in increasing the number of pills given. Each pill, or rather capsule (which is the preferable form of administration), contains three grains of mass of ferrous carbonate, two grains of potassium sulphate and one-third grain of potassium carbonate, with sufficient althea and acacia to make a mass of proper consistency. The pills (in the capsules) weigh a little over five grains each, are of medium size, keep for months, remaining soft and readily disintegrable. The formula recommended is: Mass of ferrous carbonate, 36 grains; potassium sulphate, 24 grains; potassium carbonate, 4 grains; powdered althea, 1 grain; powdered acacia, sufficient. Make into twelve pills and enclose in No. 4 gelatine capsules."

* * *

THE USE OF THE HYPODERMIC SYRINGE.—The American Medical Compend gives the following useful hint on the use of the hypodermic syringe: Drop a small piece of absorbent cotton into the fluid to be drawn into the syringe. Press the syringe against the cotton and the syringe will be filled with a filtered solution; no specks to stop the syringe and

less risk of after-irritation at the point of puncture. Hold the syringe so that the beveled surface of the needle's point shall be firmly pressed against the skin. If the syringe is held at the right angle the least puncture of the mere point of the needle will permit the fluid to pass under the scarf skin on a firm pressure of the piston. A white spot marks the success of the dose. We have thus caused the least pain. If slowly and carefully done no pain whatever is felt. The tissues are wounded the least and absorption is hastened. Always hold the syringe so that the needle points outward, and on having introduced a mere drop, wait a few seconds for a sedative effect on the tissues, then slowly push the piston home. If the needle becomes stopped, introduce the wire at the point of the needle, as the plug can be forced more easily in the direction from which it came. If the needle be stopped by a vegetable substance, hold the needle in the flame of the gas or the lamp and the plug will burn out.

* * *

A SWALLOWED DENTAL PLATE VOMITED.—Dr. Louis Kolipinski of Washington reports the following interesting case: This partial dental plate, which measures 2 by 4.5 centimeters, was accidentally swallowed by its owner in the act of beginning to take his dinner. Hurrying to a drug store, he was given an emetic. He then called on me, complaining of a heavy feeling in the epigastrium. He was directed to drink freely of milk, and, in case that vomiting did not ensue, to eat as freely as possible of mashed potatoes. He returned home, took the fluid suggested and in an hour and one-half after the accident had occurred began to vomit. The coagulated milk came up first and later the foreign body, with much distress and sense of suffocation as it passed the larynx. There were likewise some traces of blood apparent. He suffered no further discomfort. In this case the use of an emetic seems to me hardly appropriate, nevertheless "nothing succeeds like success."

CAUSES OF COUGH.—In the New York Medical Journal Dr. F. E. Hopkins gives some overlooked causes of cough. He says there are two kinds of cough, one the explosive and the other the useless and tormenting kind. In the latter class the cause often lies outside of the thoracic cavity. There is the reflex cough from the auditory canal through the pneumogastric nerve, and the same nerve may cause cough from other sources. Cough may be caused by irritation in the nose and in the pharynx. Children and even adults often cough in the night from the draining of mucus into the larynx. One of the most common causes of cough is the hypertrophied lymphoid tissue at the base of the tongue. Of this kind of cough the author gives many examples in cases which he presents. The treatment in enlarged lingual tonsil is carried out by local applications of iodine, by the modified tonsillotome and by the galvano-cautery. The nervous cough and the unnecessary cough are often heard on the approach of the physician. It is a kind of cough stopped by a strong will.

* * *

PEBBLES IN THE STOMACH.—Dirt-eating is occasionally met with in some children, but pebble-eating is rare. This case is reported by Dr. Eugene Argo in the Alabama Medical and Surgical Age. A child six years old was a dirt-eater. It was closely watched, but one day escaped, and when found had great pain. When Dr. Argo examined it he discovered hard substances over the stomach and some of them could be felt up the rectum. He finally gave chloroform, and with patience and sweet oil extracted 705 pebbles. The child recovered.

* * *

GRANULAR CONJUNCTIVITIS.—There is quoted in the New York Medical Journal an apparently effective method of treating granular conjunctivitis by local application of a solution of salicylic acid in alcohol, one to ten parts. It is applied on a pledget of cotton, and a few seconds are sufficient to be beneficial. There is pain at first, which may be prevented by cocaine. The recovery is rapid.

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BALTIMORE, MARCH 4, 1899.

In the last number of the *Alienist and Neurologist* there is an account of an actress who is said to have been

Feats of Memory. driven insane by excessive mental strain in her work. She was in a stock company which gave eight performances a week for twenty weeks, and she was in a new rôle every week, always rehearsing during the daytime of one week what she was to play the next, and in this editorial is given a list of her rôles, with the number of words in each part.

That this article is misleading is evident, for there are stock companies in many cities in which just as much and more work is done, and, with the exception of some temporary brain fog, no serious consequences follow. In some cities stock companies give two performances a day for six days, with change of bill weekly, and rehearse in between when opportunity offers. In other places two new plays are put on each week. Of course, such hasty work is not always the best, but it rarely injures a healthy person who has a sound mind in a sound body. Lack of sleep, intemperance or excesses of a more serious kind unfit persons for this work, and it was just these troubles that drove this actress to the insane asylum.

In Baltimore, for instance, there is a stock

company which presents in an admirable and artistic manner thirty consecutive weeks of good plays, a different play each week, with eight and sometimes nine performances a week, with constant rehearsals during the day, hard study at odd moments snatched from a much-needed sleep, and working on Sundays as well, and with all the incidents of costume preparation. Up to the present time no member of this excellent company has found refuge in an insane asylum nor have the papers exploited the marvelous feats of memory, and yet the record of 140,000 words memorized and played in twenty weeks, which is said to have been the feat of this poor degenerate above noted, has been far exceeded by some members of a company within the State of Maryland.

Hard work does not usually cause physical breakdown, but mental worry, dissipation of many kinds, intemperance or dissipation and excesses may undermine even the strongest constitution.

* * *

THE fact that the number of cases of small-pox in Washington continues to increase, and that there are still cases in **Nor-Vaccination.** folk and Alexandria, should make the necessity of vaccination very evident. Sporadic cases are also picked up in Baltimore. One mistake made is calling light cases "mild," thus giving the impression that mild cases are less dangerous, which is true as far as the individual attacked is concerned, but the mild cases may be less carefully watched, and as they are just as able to spread the disease, the same vigilance should be taken.

In Baltimore recently many extra vaccine physicians were appointed. Although there were already twenty-two vaccine physicians, the city council authorized the employment of about thirty more, and, with the many persons who prefer their own family physician, it seems a wonder that the whole city is not visited and each person vaccinated. While vaccination is not only important, but almost imperative, still the appointing of so many extra physicians was a questionable procedure, and so many may have not been needed had the regular force done their work as laid down for them. The trouble has been that vaccine physicians are underpaid, and the less conscientious of them neglect their work, and some have even said that they report visits and vaccinations which have never taken place.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending February 25, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	..	..
La Grippe.....	..	10
Pneumonia.....	..	37
Phthisis Pulmonalis.....	2	34
Measles.....	13	..
Whooping Cough.....	1	..
Pseudo-Membranous Croup and Diphtheria. }	22	8
Mumps.....	..	..
Scarlet Fever.....	8	3
Varioloid.....	..	..
Varicella.....	2	..
Typhoid Fever.....	*4	1

* 1 imported.

The Paris Academy of Medicine is to have a palatial new home.

The annual report of Bayview Asylum shows a steady improvement in all departments.

The German Commission for the Study of Malaria has made an extended and valuable report.

The Brompton Hospital for Consumption in London is shortly to establish a country branch.

Dr. J. C. Clarke has succeeded the late Dr. George H. Rohé as superintendent of Springfield Insane Asylum.

Some teachers in the more prominent medical schools of Baltimore are earnestly advocating a consolidation of the larger schools.

The mayor of Alexandria has refused to pay a physician for vaccination, and has employed a citizen to do the work at ten cents a person.

The Red Cross Society of Buffalo is a commercial organization, which furnishes medical attendance and medicine to the middle class for a fixed sum annually.

Illinois is considering a bill to regulate and restrict the sale of compounds or preparations of drugs or chemicals which may be poisonous or deleterious to health.

Many cases of poisoning have occurred in Paris from bread which had been baked in ovens heated by old bits of painted wood gathered from destroyed houses.

The city of Baltimore has made contracts with the National Temperance and Provident hospitals to treat the city poor in addition to other contracts announced some time ago.

Sir John Struthers, M.D., LL.D., vice-president of the Royal College of Surgeons, Edinburgh, and examiner in anatomy, Royal College of Surgeons, is dead. He was born in 1823.

The North Dakota legislature is considering a bill to regulate marriage, and a board of physicians is to be appointed to examine matrimonial candidates. It is hardly probable that such a bill will become a law.

Dr. George H. Simmons of Lincoln, Neb., and formerly editor of the *Western Medical Review*, has been unanimously elected editor of the *Journal of the American Medical Association* to succeed the late Dr. John B. Hamilton.

The Esquimaux gives the doctor his fee as soon as he comes. If the patient recovers he keeps it; otherwise he returns it to the family. In Mexico the doctor gets his fee before the patient is buried; otherwise the deceased is believed to dwell in purgatory until the fee is paid.

The American Academy of Medicine has prepared a very elaborate and interesting programme for the Columbus meeting in June. The three subjects, "Specialism in Medicine," "Advertising and the Medical Profession" and "The Medical Service of the Army and Navy," will be discussed.

The death is announced in Richmond of Dr. Creed Thomas, aged eighty-seven. Dr. Thomas studied first at the University of Virginia and later came to Baltimore, where he received his medical degree at the University of Maryland in 1835. He had not practiced for several years before his death.

Many of the New York theater play-bills contain the following notice: "Physicians who have patients to whom they may be called suddenly, and who have heretofore remained away from the theater for fear of being out of call in such cases, can now leave their seat numbers in the box office and be called as quickly as in their office. Ushers will deliver messages to them promptly upon receipt of same over the telephone."

Washington Notes.

The building for minor contagious diseases on the grounds of the Providence Hospital will soon be in process of construction.

The remains of Dr. John B. Hamilton, late surgeon-general of the Marine Hospital Service, were transferred to this city from Elgin, Ill., and interred in Arlington National Cemetery. Dr. Hamilton died December 24, 1898.

At the last meeting of the board of directors of the Eastern Dispensary and Emergency Hospital Dr. George N. Acker was elected to the consulting staff and Drs. Edward F. Pickford and Archie W. Boswell were elected to assistant staff.

There are now over thirty patients at the Smallpox Hospital. It is the intention of the Health Department to lease several buildings in the neighborhood of the hospital for the purpose of placing in quarantine persons who may be found in infected houses.

At the Medical Society of the District of Columbia Wednesday evening Dr. Richardson reported a year's work in intubation, and Dr. De Schweinitz reported the bacteriological examination of the milk from the Pasteur Laboratory since January, 1898.

The Second Annual Report of the Episcopal Eye, Ear and Throat Hospital shows that from January 1, 1898, to December 31, 1898, 1279 patients were treated at the institution, 173 of which were house patients. The number of operations for the year was 220; number of revisits, 6237.

Book Reviews.

AMERICAN POCKET MEDICAL DICTIONARY. Edited by W. A. Newman Dorland, M.D. Containing the Pronunciation and Definition of over 26,000 of the Terms used in Medicine and the Kindred Sciences, along with over 60 Extensive Tables. Philadelphia: W. B. Saunders. 1898. Price \$1.25 net.

It seems to be the order of the day to publish medical dictionaries. This little one is well bound in flexible morocco and contains over 26,000 words. The spelling is not objectionable. It is a handy volume and will prove a favorite.

GRIFFITH'S MATERIA MEDICA FOR NURSES. Philadelphia: P. Blakiston's Son & Co. 1898.

This may prove to be a very useful little book for students. The author has followed the advanced manner of spelling and uses such words as "chemic," which are not beautiful. There are questions at the end of each chapter. The book contains no therapeutics.

REPRINTS, ETC., RECEIVED.

University Medical College of Kansas City, 1898-99.

Bicycling: Its Use and Abuse. By Carl Anderson, D.D.S., M.D.

Advances in the Domain of Preventive Medicine. By J. M. G. Carter, M.D.

College of Physicians and Surgeons of Baltimore. Annual announcement and Catalogue, 1898-99.

Seventeenth Annual Announcement and Catalogue of the Woman's Medical College of Baltimore, 1898-99.

Sponge-Grafting in the Orbit for Support of Artificial Eye. By E. Oliver Belt, M.D. Reprint from the *Journal*.

Glaucoma, with Detachment of the Retina. By William Cheatham, M.D. Reprint from the *Annals of Ophthalmology*.

Orthoform and Extract Suprarenal Glands. By W. Cheatham, M.D. Reprint from the *American Practitioner and News*.

Principal Poisonous Plants of the United States. By V. K. Chesnut. Washington: Government Printing Office. 1898.

Sponge-Grafting for Reinforcement of the Stump Enucleation. By E. Oliver Belt, M.D. Reprint from the *Ophthalmic Record*.

Sanitation and Cleanliness in the Prevention of Yellow Fever. By Stephen Harnsberger, M.D. Reprint from the *Philadelphia Medical Journal*.

The *North Carolina Medical Journal* will hereafter be published in Charlotte. Dr. Robert D. Jewett will continue as editor, and associated with him are Drs. Robert L. Gibbon and W. K. Wakefield.

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Original Articles.

THE RADICAL CURE OF FEMORAL HERNIA.

By J. M. T. Finney, M.D.,

Associate Professor of Surgery, Johns Hopkins
University.

READ BEFORE THE BALTIMORE MEDICAL AND SUR-
GICAL ASSOCIATION, NOVEMBER, 1898.

WHILE the medical journals of recent years abound in articles that have to deal with the radical cure of inguinal hernia; one who has given any attention to the subject must have been struck with the paucity of literature dealing with the operative treatment of the femoral variety. Still, in reviewing the work done in the past twenty years one finds that a not inconsiderable amount of very interesting material has accumulated.

The subject of this paper was suggested to the writer last year while doing some special work in the dissecting room. The collection of material for the paper progressed rather slowly until the appearance of a very complete and exhaustive monograph on the subject by Dr. Henry M. Silver of New York in the *New York Medical Journal* for August 13 and 20 of last year, and it is to this author that I am indebted for many references to the writings of others.

While dissecting the femoral region it occurred to the writer that, from its anatomical relation, the adductor longus could be advantageously used in filling up the femoral canal. The operation was practiced repeatedly on the cadaver, and later opportunity offered in the operating-room. At the time I supposed this operation to be a new one, but, as is often the case, upon investigating the subject

further I found that I had been preceded. Before detailing the steps of the operation let us review briefly some of the operative procedures that, from time to time, have been suggested. I shall divide the various operations found described in the literature into three main groups, as follows:

Group I.—Those which deal with the sac alone, making no effort to close the canal or rings.

Group II.—Those which deal with the closure of the rings and canal, either partially or completely, with tissues transplanted from the immediate neighborhood, paying more or less attention to the sac.

Group III.—Those which deal with the plugging of the canal or rings by foreign substances.

In the second group is to be found the large majority of the operations.

A word as to the management of the sac in general. Much importance is attached by many writers here, as in the case of inguinal hernia, to the disposition of the sac. It must be so left, they say, that there will be no depression or "dimple" from within out, to act, when filled with omentum or bowel, as a wedge in the subsequent reproduction of the hernia. To overcome this real or fancied objection (and we cannot but believe it to be more of the latter than the former) various devices are made use of; for instance, Macewen folds the sac upon itself several times, making it into a pad, which he places over the internal ring. Kocher twists the sac upon itself several times and brings it out through an opening in the fascia of the external oblique and sutures it to Poupart's ligament. Bassini twists the sac, ligates it high up, cuts off and returns the stump into the abdominal cavity. Fowler cuts away the

sac entirely and sutures the peritoneum as in ordinary laparotomy.

Many other methods of disposing of the sac are devised by different authors with the same object in view, namely, that of leaving the peritoneal surface smooth, and some still further make use of the sac as an additional barrier. We cannot but think that the peritoneum, thin and elastic as it is, can offer at best but a slight resistance to the progress of the hernia, and so make no attempt to do more than ligate the sac, relying upon it little or not at all for assistance.

Under Group I, that is, those dealing with the sac alone, Socin, who is credited with the origination of the operation in 1879, simply ligates the sac high up and cleans out the canal, leaving it to fill up with fibrous tissue. Others make use of a similar procedure, as Banks, Halsted, etc., who, after ligating the sac, pack the canal with gauze and allow it to granulate up.

Group II, that is, those making use of some substance transplanted from the immediate neighborhood of the canal, we will again subdivide into five divisions as follows:

(a) Those who make use of the sac with which to plug the canal; for instance, Macewen, as described above, Kocher and others. Davis and Phelps tie the sac, invert it into the peritoneum and then take a purse-string suture outside, around the base.

(b) Those who relax Poupart's ligament by dividing it wholly or partially, thus bring it down and obliterate the canal. Fabricius, Fowler, etc., advocate this procedure. The objection to it is that by pulling down Poupart's ligament in this manner the tendency is to weaken the external abdominal ring.

(c) Those who suture the iliac and pubic portions of the fascia lata over the saphenous opening. This class includes by far the greater number of operators. Bassini, Cabot, Cushing, Salzer and others have accomplished the same thing by slightly different methods. The objection to this operation is that it does not always close the canal and places the barrier to the progress of the hernia at the lowermost end of the canal, leaving the canal itself open.

(d) Those who plug the canal with muscle transplanted from the immediate neighborhood—Watson Cheyne, Moullin, Swartz, Pouillet and the writer. Watson Cheyne turns up a flap of the pectineus muscle and fascia, with which he fills up the canal. Moullin uses the pectineus and adductor longus. Swartz used the adductor longus alone. (*Assoc. Franc. de Chirug.*, VII, 689, Paris, 1893.)

Pouillet used portions of the tendon of the rectus femoris and adductor longus. In our work we have made use exclusively of the adductor longus, and believe that, from its anatomical relations and structure, it is the muscle best adapted for the purpose. Starting as it does with a tendinous origin from the front of the pubic arch, and bellying out rapidly as it extends down the front of the thigh, it is peculiarly well adapted for this purpose.

The steps in the operation are briefly these: After exposing the femoral opening, isolating, ligating and resecting the sac, the canal is laid open. Upon retracting the lower skin flap strongly downwards the adductor longus is exposed, and a portion (say a piece the size and length of the little finger, or larger,) is split off up to near the origin of the muscle. When freed from its attachments, except the origin, it is brought up and laid in the femoral canal throughout its entire length and held there by a suture somewhat similar to the purse-string suture recommended by Cushing of Boston; that is, beginning through the fascia of the external oblique down through the muscle, through the pectineal fascia, across the muscle, through the falciform ligament, through Poupart's ligament and tied. This holds the muscle firmly in place, plugs completely the femoral canal, and, with a few additional sutures below, through the pectineal fascia, muscle and falciform ligament, completely closes the femoral opening.

The advantages of muscle for plugging the canal are that it is better supplied with blood, is more elastic, and, while some or all of it probably becomes transformed later into fibrous tissue, it is a more resisting form of scar tissue than that which comes from the fascia, and it is also easily accessible.

(e) Those who close the canal with an osteo-plastic flap—Trendelenburg, Koerte, Wolf and others. These operators chisel up a flap of bone and cartilage from the anterior surface of the pubic arch, reflect it back, and with this fill the femoral canal, leaving free drainage. This makes a very extensive operation, and the results of the few cases so far reported are not satisfactory.

In the third group are those who plug the canal with foreign substances, absorbable or otherwise, among whom are Salzer, Thierner, Schwartz and Kelly. The materials that have been made use of are decalcified bone, glass-wool, glass ball, strands of catgut, etc. The objection to these is the same as to any other foreign body, that they are liable to produce irritation and may eventually work to the surface.

Some operators recommend the inguinal incision, as in inguinal hernia—Tuffier, Ruggi, Silver and others—claiming that one gets a better exposure of the sac and contents by this method. This is probably true, but it seems to us that a sufficiently good exposure can be obtained through the ordinary incision and that the inguinal route is unnecessarily involved. One should always bear in mind, in operating upon inguinal hernia, the liability of injuring the bladder. A number of such cases have been reported in literature, one of which happened to the writer.

As to final results from the radical operation, there have been too few cases by any one method, and the length of time has been too short to judge as to the respective merits of the different operations. It may be claimed, and with justice by some, that any operation will cure a femoral hernia. It is true that, as compared with inguinal hernia, there are few recurrences, but one should aim always to find the best method and the one best adapted to all cases.

In the Johns Hopkins Hospital twenty-six cases have been operated upon for the radical cure of femoral hernia—seven of these by the open method, fifteen by closure and excision of the sac and suture of fascia over the saphenous opening,

three by muscle transplantation. So far no recurrences have been observed.

A full list of references to the literature of the subject will be found in the article by Silver, above referred to; they are, therefore, omitted here.

NOTES ON RECENT SCIENTIFIC LITERATURE.

By William Lee Howard, M.D.,
of Baltimore.

IV.

No physician today can offer as an excuse for not being familiar with psychological matters, the scarcity of books upon the subject. The correlation of physiological science and psychological investigation has brought us nearer the understanding of self and personal motives than man has ever been. A proper understanding of modern psychological investigations will do more for the moral improvement of man than any teaching heretofore premonstrated. In its present state it bears no relation to the senile philosophy of the past, or the false reasoning of the early metaphysicians—that distasteful psychology of the theologians which taught that consciousness reveals certain great ideas as simple and original, consequently they must be so. If you do not find them in the child-mind, then you must read them into it.

The genetic idea reverses all this. Instead of a fixed substance, we have the conception of a growing, developing activity. Functional psychology succeeds faculty psychology. Instead of beginning with the most elaborate exhibition of this growth and development, we shall find more instruction in the simplest activity, that is, at the same time, the same activity. Development is a process of involution, as well as evolution, and the elements come to be hidden under the forms of complexity which they build up. Are there principles in the adult consciousness which do not appear in the child consciousness? Then the adult consciousness must, if possible, be interpreted by principles present in the child consciousness, and where this is not possible the conditions under which later

principles take their rise and get their development must still be adequately explored.

Something after this method of reasoning is to be found in Prof. Mark Baldwin's "Mental Development" (MacMillan & Co.). The book should be read by every physician who cares about keeping in touch with the advances in material science. The man whose profession brings him in contact with children, be they feeble-minded or not, should study this work.

One fact regarding this country's present political condition bears directly upon the study of psychology, yet it has been thus far overlooked. The psychologist finds that many men who are apparently in a normal mental condition, are in reality moral perverts. Such persons have mental qualifications of sufficient force and intensity to hide their real condition; in fact, their lower moral responsibility is seldom noticed until some force of circumstances brings it prominently forward. It is then often too late; the man has been given power and control, and is blamed and anathematized for actions due to moral palsy as uncontrollable as physical palsy.

Such a man has been taught the same lessons as the rest of mankind, and has a full theoretical knowledge of them, but he has not really assimilated them; the principles inculcated never gain that hold of his mind which they gain in a sound and well-constituted nature. No amount of advice, no pressure of ridicule, is forcible enough to change a congenital condition. A man born with a false idea regarding his relation to society is, indeed, unfortunate. To the end he will feel and think that he is right; that all others are wrong. To him evil is good, and good, evil. Controvert this man's opinion and he will cry "persecution," and reckon himself with St. Barnabas, who was sawn in two. We have had many examples the last few months of the want of conscience among men, and, personally, I am grateful for the opportunities of studying this phenomenon.

Conscience is a function of organization—the highest and most delicate and most complete development thereof—and man's moral nature is determined by the

strength and intensity of this conscience. It is often perverted by disease and injury of brain; often it is undeveloped, and throughout the individual's existence remains an unknown factor. To such a man the amenities of life are nothing; moral obligations a myth, slander, insults and gibes, the mere growlings of jealous and disconcerted enemies. But above all this hiatus of conscience rises the forcible stigmata of the moral degenerate as seen in morbid egoism and the impassioned desire for power and notoriety.

A book has been sent me, entitled "Sunny Life of an Invalid Fifteen Years in Bed." I refrain from giving this laughable hypochondriac's name. The author evidently has just enough medical lore—all these troublesome neurasthenics and hypochondriacs read more or less medicine—to make himself ridiculous. A specimen of his wail will help our digestion. Says this *heautontimorumenos*: "My opinion of diphtheria is that it beats hanging as a capital punishment.

"For a disease which, for pain, should take the first prize at an international congress of disease, I should, after a fair trial, recommend pectora angina (*sic*). To sum up, in 1897: Fourteen years in bed; twenty-six years an invalid; twenty years without vegetables or fruit of any kind; twenty-three years without pastry or candy; two years on scraped beef (*raw*), for six months nothing else; fifteen years on milk, raw eggs and chopped beef (often *raw*).

"As to diseases: First, fifty-four attacks of pectora anginus; second, heart disease; third, rheumatism; fourth, neuralgia all over; fifth, dyspepsia; sixth, kidney trouble; seventh, semi-paralysis of the legs; a second shock, which left me for two years unable to turn my neck; [What an acrobat he must be!] eighth, feet have to be propped up day and night; ninth, hands propped up by tapes (*sic*); tenth, twelve years bowel trouble, caused by malaria, diarrhea and dysentery in Italy, followed by three years of constipation, necessitating every second day an injection of water at 98°, self-administered (2400 injections to date, of one quart water, with a touch of castile)."

But this is sufficient. We can now easily diagnose his case.

Medical Progress.**PROGRESS IN SURGERY.***By Randolph Winslow, M.D.,*

Professor of Anatomy and Clinical Surgery, University of Maryland.

DURING the past year the liver and its appendages have been the recipients of a considerable amount of surgical attention. Previous to 1878 the gall bladder was considered to belong to the realm of medicine rather than to that of surgery, though cholecystotomy had been performed by Bobbs of Indianapolis in 1867. In 1878 Marion Sims perfected the operation and established it on a permanent basis. Since that time operations on the gall bladder and biliary passages have been performed with constantly increasing frequency and success.

Cholecystotomy for the removal of biliary calculi is one of the most successful operations of surgery. When, however, the calculus is impacted far down the common bile duct it may become necessary to incise this duct in order to effect the removal of the concretion. As this duct lies deeply it is neither easy to remove the calculus nor to suture the incision in the common duct after its removal. To facilitate this suturing Halsted of the Johns Hopkins Hospital has devised a series of small hammers, with long handles, for insertion into the duct. After the insertion of the sutures the hammer is withdrawn and the sutures tied. It is claimed that the operation is much expedited by the use of this mechanical device. Dr. Halsted's article is published in the *Bulletin of the Johns Hopkins Hospital* for April, 1898.

Recognizing the difficulty in some cases of locating and exploring the common bile duct, Weller Van Hook, in the *Annals of Surgery* for February, 1899, advocates "air distention in operations upon the biliary passages," and reports a case in which this device was successfully employed. He has summarized his conclusions as follows:

1. It enables us quickly, safely and absolutely to identify these tubes without overlooking any part of them. This is

of especial advantage in the dissection of adhesions and neoplasms about the ducts.

2. It enables us to readily locate obstructions.

3. It enables us to approximately determine the degree of obstruction.

4. It will facilitate the location of diverticula.

5. It will guide us to perforations leading to abscess cavities or to the free peritoneum.

6. It will enable us to open the ducts safely and without the fear of incising a collapsed vein.

7. It enables us to sound the ducts for stone or stricture by passing the sound into the distended duct, either through the gall bladder or through an opening in one of the ducts.

8. It enables us more effectually to palpate the walls of the ducts both from without and from within.

9. It gives us an ideal method of testing the accuracy of our sutures in the duct walls.

Whilst Van Hook has devised a special apparatus for distending the ducts, it may be readily done with any force pump, and in the case reported he used an ordinary bicycle pump which had been sterilized.

At times a calculus becomes impacted in the diverticulum of Vater at the termination of the common bile duct in the duodenum, and it is impossible either to extract it or to push it forwards or backwards. The suggestion to open the duodenum and incise the orifice of the bile duct from within the duodenum was made by McBurney six years ago, and has been done in a number of instances with excellent results. Dr. McBurney again brings the matter to the notice of surgeons in the *Annals of Surgery*, Vol. XXVIII, page 481.

In the same journal, page 518, laudatory expressions concerning the value of this operation are made by Drs. Briddon, Weir, Kammerer, Curtis and McCosh. McBurney says: "My conviction is that this operation has a much wider application than I have thus far given it, and my experience would lead me to prefer this plan for the removal of a calculus

situated at almost any point from the termination of the cystic duct to the point of entrance of the common duct into the duodenum."

Another remarkable publication, entitled "On Re-establishing Surgically the Interrupted Portal Circulation in the Cirrhosis of the Liver," by Robert F. Weir, M.D., appears in the *Medical Record* for February 4, 1899. Dr. Weir gives a short *résumé* of the efforts that have been made in this direction.

In 1896 Dr. Drummond and Mr. Rutherford Morison published in the *British Medical Journal* a communication entitled "A Case of Ascites Due to Cirrhosis of the Liver Cured by Operation." The operation consisted in making an incision and causing adhesions between the omentum and parietal peritoneum and between the liver and the diaphragm. The incision between the umbilicus and pubis opened the peritoneal cavity. The peritoneum on each side of the incision was thoroughly scrubbed, as was that of the liver, spleen and organs opposed to them. The omentum was sutured across the anterior abdominal wall and the wound closed, except where a glass drainage tube was introduced into the pelvis. Two operations of this character were performed. In one patient no improvement followed; in the other a brilliant success was achieved, and she was exhibited at the meeting of the British Medical Association eleven months later in apparently perfect health.

Talma of Utrecht, in *Berliner Klinische Wochenschrift* for September 19, 1898, reports a case successfully treated by operation. A boy nine years old, who was suffering from anasarca and ascites, due to lesions of kidneys, liver and spleen, was subjected to three laparotomies. The first operation was an exploratory incision, followed by gaping of the wound for five days, with prolapse of the omentum, a part of which was cut off and the rest replaced and the incision closed. Six weeks later a second laparotomy was done and the omentum stitched in the wound. No further ascites occurred, but the enlargement of the spleen remained, and a third laparotomy was done and the lower end of the spleen was tucked in

between the peritoneum and skin to facilitate adhesions and venous intercommunication. One year later the patient was in good health, the urine normal, the liver reduced in size and the spleen much smaller. Large veins were seen in the skin running from the region of the spleen toward the coudal region.

Dr. Weir's case was that of an inebriate, aged thirty-nine years, who had noticed an enlargement of the belly for nearly two years. A diagnosis of hypertrophic cirrhosis of the liver and portal obstruction was made. He was tapped many times without lasting benefit, and it was thought a suitable case for surgical effort. A four-inch incision was made through the upper part of the right rectus muscle and the peritoneal cavity opened. Several quarts of fluid escaped and the abdomen was thoroughly emptied. The superior surface of liver and the diaphragm and parietal peritoneum were scarified with the point of a steel hat pin and the omentum stitched on each side of the wound and the wound closed. A glass tube was also passed into the pelvis through a small incision over the pelvis and drainage effected by syphonage. The patient died on the fifth day from infection through the drainage tube.

Of seven cases operated on by different surgeons two recovered, two recovered from the operation, but were not benefited, and three died, one from shock and two from infection through the drainage wound.

This subject is an interesting and suggestive one and will doubtless be heard of again in the future.

CONSTIPATION IN CHILDREN.—Dr. Louis Fischer (*The Canadian Journal of Medicine and Surgery*, January,) writes: "An invariable rule followed by me in children is never to permit a child to retire for the night without a movement of its bowels; consequently, if the infant has been constipated during the day I advise the injection of one pint of a mixture consisting of two-thirds warm water and one-third glycerine—the latter to be used to soften hardened accumulations of feces in the rectum."

Society Reports.**THE JOHNS HOPKINS MEDICAL SOCIETY.**

MEETING HELD MONDAY, MARCH 6, 1899.

TENDON TRANSPLANTATION.

DR. KNOX read a paper entitled "Tendon Transplantation," with a report of seven cases. The author reviewed at length the literature bearing upon this subject and described the methods adopted today in the effort to regain lost functions in a limb that is distorted or paralyzed. He reported seven cases of tendon transplantation performed in the Hopkins Hospital by Drs. Finney and Cushing, and exhibited photographs showing the remarkable improvement in patients brought about by such an operation.

DISCUSSION.

Dr. Cushing said he had nothing to add to Dr. Knox's very careful review of tendon transplantation, but that one could readily see what extreme interest there must be to a surgeon in cases of this kind. The interest at the operating table is intense—first, watching the readjustment of muscles for the sake of getting new functions in a foot which is without proper muscle, and, secondly, the pleasure of seeing lame individuals made to walk better. When one sees, as we do every day, cases of paralytic club-foot walking badly on the street, we feel that if they are only brought to the attention of surgeons with sufficient emphasis, during the next few years such cases will be rare—in fact, as rare as cases of Pott's disease are today.

Dr. Finney said that it is a most interesting subject, one comparatively young, and in which there is great field for development; also, the methods which are in vogue at present must be tested by the great rule of time to try their efficiency, and even these methods are undergoing constant change. It certainly offers a most interesting field for the surgeon and a most helpful one for the patient.

TREATMENT OF ACUTE OTITIS MEDIA FOLLOWING INFLUENZA.

Dr. Theobald wished to speak especially of the abortive treatment of these cases when one could see them in the earliest

stage. Everyone knows that many serious cases of ear disease have followed influenza, and a larger number than usual have involved the mastoid process, also many the bone in the neighborhood of the tympanic cavity.

The statistics which Dr. Bacon gives bearing upon this subject are very interesting. A few years ago from twelve to twenty cases of mastoid disease were about the average number met with at the New York Eye and Ear Infirmary; in 1896 there were 135 mastoid operations; in 1897 there were 161, due to the prevalence of influenza and the great number of serious ear cases which have followed it.

The most serious involvement is when the brain is affected. The brain as secondary to suppurative trouble of the middle ear, may be involved in several ways. Epidural abscess is one of the more common forms of purulent meningitis; abscess of the brain substance itself is another, and thrombosis of the lateral or sigmoid sinus is still another.

In reference to infection of the middle ear, he said there are several ways in which the tympanic cavity and mastoid cells may be involved in this affection, as in other types so common, such as scarlet fever and measles, the most common being through the Eustachian tube. Nature has provided an arrangement to lessen the likelihood of this occurring, the ciliated epithelium of the Eustachian tube acting to prevent the entrance of bacteria from the nasal cavity to the middle ear, but it is only partially successful. The middle ear is also not infrequently involved through perforation of the tympanic membranes, the entrance in that way being through the blood vessels or lymphatics. Various organisms have been found in the suppurative middle ear inflammation in connection with grip and other diseases. *Staphylococcus aureus* and *albus* are frequently found, and are more apt to be present in the milder cases; *pneumococcus* and *streptococcus pyogenes* mark the more serious cases as a rule. The micro-organism which is supposed to be at the bottom of the influenza is occasionally found, but not usually in the suppurative cases without the

accompaniment of other organisms. His own experience is that the purulent infection occurs very frequently in middle-ear inflammation, either after the perforation of the tympanic membrane (in some instances the infection occurs, of course, after an incision of the drum membrane) or after the attack has actually occurred, but it is not always so. Often on making an incision of the tympanic membrane the discharge which comes through the incision is not purulent but sero-mucous in character, somewhat tinged with blood, and does not contain pus. It is a very difficult matter, even with full antiseptic precautions, to prevent infection after incising the tympanic membrane, the skin lining the external auditory canal not being so easy to get at as that of other parts of the body.

He thought if we could see these cases within a few hours the attack could be cut short. This is to be desired, because if the inflammation runs to the point where an incision of the tympanic cavity is necessary, it is extremely difficult to prevent suppuration.

He then referred to a fatal case of middle-ear disease. The patient had had influenza and was afterward exposed to cold. On Friday evening she was taken with earache and suffered severe pain; the next day she was given morphia rather liberally, and on Sunday she began to show symptoms of muscular irritation, with something like spasmodic movements of the limbs. On the following evening she was entirely unconscious, with a temperature of 105° and a very rapid pulse. There was no reason to suppose that the mastoid process was involved, and but little optic neuritis, so that he decided there was nothing for him to do, but that an operation upon the brain itself might be necessary. Dr. Finney was called, but decided that it was too late to take any operative steps.

This, of course, is an extreme instance of what may happen with suppuration of the middle ear, the patient being taken Friday evening and died on Tuesday before noon. If we can then abort these cases, it is most important to make the attempt, and make it very early.

Dr. Theobald's plan of treatment is to

use, promptly, in the ear a solution of atropia. To this he has added recently cocaine, giving one grain of atropia sulphate and two grains of cocaine muriate in two drachms of distilled water, about eight drops being poured into the ear three or four times a day, according to the pain. Several years ago he had prepared an oily solution with the alkaloids of atropia and cocaine which has certain advantages. The oil remains in contact with the tympanic membrane and walls of the canal better than the watery solution, and where there is a small perforation it does not find its way so readily into the middle ear, to produce more constitutional effects than is desirable. With this local treatment which he has prescribed he often combines the administration of small doses of calomel until it produces the desired effect upon the bowels, or, failing to get such an effect, he follows it up with a saline cathartic. He has often found it convenient where acute tinnitus is present to give muriate of ammonia in 10-grain doses perhaps four times a day. The pain, of course, is not always relieved by the local anodynes, and then it may become necessary to supplement them with morphia. It is not safe, of course, to wait indefinitely for the action of this remedy, but he is sure he waits longer than some would before incising the tympanic membrane. Not infrequently he uses the local treatment, when many others would be called upon to incise the tympanic membrane; he may even find some bulging, and yet feel warranted in treating the case in this way. If the pain is not overcome, and there is evidence that the tympanic cavity is distended, free incision should be made, and preferably through the posterior portion of the membrane. One does not make a small puncture, but makes a liberal incision, beginning in the upper posterior border and carrying it down parallel with its posterior margin. After this has been done, syringing out with an antiseptic solution like boracic acid two or three times a day is adopted, and if this treatment does not promptly bring about a change, a weak solution of bichloride, from 1 to 8000 to 1 to 4000, is used. The effect upon the hear-

ing is not usually disastrous, even in the more serious cases, and in the less severe cases we expect the normal hearing to be restored.

DISCUSSION.

Dr. Reik wished to add a few words as to the treatment of these cases. He believed in free and early incision of the tympanic membrane; but, where it is possible to adopt the conservative line of treatment as given by *Dr. Theobald*, he would, in addition, make use of the local extraction of blood, either by natural or artificial leeches applied over the mastoid region. He had tried this a number of times during the recent epidemic of grip (he thinks these cases have been much more common this year than in the former epidemics), and had been pleased with the result. In many cases the cocaine and atropia seem to have little or no effect upon the pain, but a few minutes after leeching the pain disappeared and the patient went to sleep.

Dr. Theobald said there was no question as to the value of local extraction of blood in these cases, especially in the more severe attacks.

Dr. Finney said that when he saw the patient *Dr. Theobald* had referred to she was comatose, with a pulse that could hardly be counted, and a temperature of 105° or 106°, and utterly beyond operative treatment. No evidence whatever could be obtained that would aid in the localization of the trouble, and even if the location of the trouble could have been ascertained, at that time there could have been no operative interference.

He referred to a similar case, but with a more happy termination. About ten days after she had apparently recovered from grip the patient was taken with earache in the right ear. She noticed some slight discharge on the pillow, but the physician was unable to find any discharge from the ear, nor was there any from either ear when seen by *Dr. Finney*. The patient was stupid and dull, different from her usual manner; could be roused to answer questions intelligently, but had to be shaken, and upon pressure upon the right mastoid she evinced some pain, though nothing else seemed to disturb her. There was no evidence of swelling

or redness or other mastoid trouble other than history of headache on that side and some tenderness. He thought it best to open the mastoid cell, and did so, but found it empty, and no evidence of trouble so far as he could detect. He continued the opening in the bone until the lateral sinus was exposed, and this he punctured. It bled very freely, and he was quite convinced that the lateral sinus was not thrombosed, at least. He drained the wound, and the patient made a rapid improvement and is now entirely well.

A HITHERTO UNDESCRIBED PEPTONIZING MICROCOCCUS CAUSING ULCERATIVE ENDOCARDITIS.

Dr. Hastings related the history of a case of ulcerative endocarditis, from which *Dr. MacCallum* secured the organism in question.

Dr. MacCallum said the autopsy revealed an endocarditis of the aortic and mitral valves, both of which were covered with vegetations. The organism is a small micrococcus, appearing in pairs for the most part; is not motile, and stains well by Gram's method. It somewhat resembles the diplococcus lanceolatus, and is not a profuse grower. It grows best upon glycerine or glucose agar. In litmus milk it first decolorizes, then coagulates, and peptonization and digestion of the clot follows. This appears to be a new organism not hitherto described, and *Dr. MacCallum* suggests for it the name of diplococcus zymogenes.

DISCUSSION.

Dr. Flexner thought there could be no question that this is a new organism. Although it resembles some of the known forms, yet its differences are greater than its resemblances.

THE MEDICAL SOCIETY OF THE UNIVERSITY OF MARYLAND.

MEETING HELD TUESDAY, FEBRUARY 21, 1899.

THE meeting was called to order by the president, *Dr. John S. Fulton*.

EXHIBITION OF CLINICAL CASES.

Dr. Blackburn: Man, forty-three, with no history of any nervous disease in family; no remembrance of diseases of childhood; no remembrance of being sick in bed until twenty-five years old, when he

had malaria; never been sick since. About 1st of last August patient noticed that his fingers on each hand became numb and stiff; gradually his entire hand became stiff; then had a feeling as though pins and needles were sticking in his feet, and by degrees he became unable to tell where his feet were unless he could watch them. Feet became numb, and felt as though drawn toward the instep. This feeling extended toward the thighs, where he now has the sensation of being pricked with pins and needles. For the past week or ten days has had a twitching of the legs, and has had shooting pains in lower part of abdomen. For the past three or four weeks he has felt as though something were tied around abdomen. Sensation is less acute than normal, and, although sometimes delayed, is usually transmitted normally. The impairment of sensation is more marked in the hands, ankles and in a zone around the body just above the umbilicus. There is loss of power in the hands and wrists and a decided tendency towards spastic contraction of the fingers and toes—more marked on the right side. Otherwise the strength of the patient seemed unimpaired. The skin reflexes were rather feeble, the deep reflexes exaggerated, with slight exaggeration of the knee-jerk and a tendency towards ankle-clonus in each ankle. There was marked loss of co-ordination, involving the upper as well as the lower extremities, the inco-ordination being much more marked when the eyes were closed. The pupils react both to light and accommodation, and there were no retinal changes. Patient has never had any disorders of vision, no paralysis of the ocular muscles and no double vision. He has some difficulty in micturition, which is only momentary, however; is constipated, but has complete control over the sphincter muscles. The muscles of the hands react sluggishly to the Faradic current.

Dr. Robert Reuling said there were some points of especial interest in the case. First, it did not correspond to the ordinary cases of spastic paraplegia; also that it might be a case of amyotrophic lateral sclerosis, in which the spastic condition often shows itself in the lower extremities

first and the muscular changes come on later. The disease, he says, is a progressive one, and the process, as a rule, extends downwards and upwards in the cord, so that later symptoms of the affection of the middle come on.

Dr. Robins said there were some very striking points about the case rather suggestive of tabes dorsalis; for instance, the inco-ordination was extremely marked in this case, and there was also a slight area of anesthesia. While some of the symptoms were against tabes dorsalis, others, he thought, were for it, and a diagnosis of lateral trouble should be made with a certain amount of hesitation.

Dr. Reuling said that he could not see any of the cardinal symptoms of tabes dorsalis, as the whole appearance of the case positively excluded tabes dorsalis as he knows the disease.

APPENDICITIS, WITH GROSS AND MICROSCOPICAL SPECIMENS.

Dr. Wm. R. Stokes first made a few remarks concerning the bacteriology of appendicitis, saying that it simplifies matters considerably to bear in mind that the vast majority of appendicitis are caused by the presence of some variety of the pus organism, and it was well to include under this the bacillus coli communis. As is well known, the bacillus coli communis is a normal inhabitant of the intestinal canal, and under normal conditions is harmless, but if, for some reason or other, the mucous membrane of the appendix becomes irritated the colon bacillus is there and sets up an inflammation of the mucous membrane. In a number of cases there is simply a gangrenous condition of the appendix, the blood supply will cease, offering the bacteria an excellent opportunity to penetrate through the gangrenous appendix. Even so harmless an organism as the bacillus coli communis is able to penetrate and get into the peritoneal cavity, and there is little doubt that this organism can set up irritation and produce peritonitis. We, of course, have appendicitis from the rupture of the appendix, the most frequent cause of actual rupture being either an ulcer from tuberculosis or typhoid fever.

Dr. Tiffany then exhibited seventeen specimens of appendices removed by operation for inflammation, four of them being perforations. He said that in a certain number of cases the appendix is often represented by an entirely black mass. In one case the inflammation and ulceration in the bowel had caused obliteration of the vessel, and the part of the appendix distal to the ulcer was black. This, he said, he had the opportunity of seeing two or three times, and in all cases where the appendix was black and gangrenous he found obliteration of the nourishing vessel, so that the gangrenous appendix is probably the result, in many cases, of appendicular ulcer.

Dr. Tiffany said that among the questions that naturally suggested themselves regarding this subject of appendicitis comes the one, "How is it that appendicitis is at the present day such an extremely prominent subject, and yet several years ago it was very rarely heard of?" He says there are probably two causes, one that they did not have appendicitis in times gone by, the other that the physician failed to recognize it. During three years of his student life, out of about 350 post-mortems he saw but one of appendicular disease. The most successful of all operations are those done between attacks; the next most successful are those done both after and before the peritoneal coat is involved.

Dr. Randolph Winslow said that he thought the sooner a case of appendicitis was operated upon the better for the individual, and that he would always advise an operation. When removed in a clean peritoneum the dangers are practically nothing; when removed after the peritoneum has been involved, but an abscess has not formed, the dangers are still slight; when the operation is not performed until after the peritoneum is damaged the danger is greater and the operation more difficult.

Dr. A. D. Atkinson said he thought there was no disease that so often misleads the physician and surgeon as appendicitis, so far as the diagnosis is concerned. He said the ordinary typical cases of appendicitis could readily be recognized from the swelling in the lower abdomen, the pulse

and the temperature, but not so with the cases where all the symptoms are obscure, where there is probably but little pain in the abdomen, the pulse good and no swelling at all, and it is in just these cases where the diagnosis is often of so much importance. He said that in many instances a great deal can be discovered by the very careful examination of the blood and the careful counting of the leucocytes. In almost all inflammatory troubles there is an increase of leucocytes per cubic millimeter.

"A Case of Infantile Paralysis, with Exhibition of Brain and Cord," was reported by *Dr. L. M. Allen*, with the pathological report by *Dr. Latané*.

Dr. Reuling, in referring to this case, said the important features were the muscular atrophy and the shortening in the bones, which is especially characteristic of these cases of infantile paralysis.

THE TREATMENT OF ASTHMA.—The Therapeutic Gazette quotes *Von Noorden* as having stated that atropine in ascending doses is the best treatment of asthma of spasmodic type. The treatment should be continued for from four to six weeks. In his hands the method consists in administering 1-120th of a grain of atropine every two or three days, and then gradually increasing the dose until it reaches as much as 1-20th or 1-12th grain, after which the dose may again be decreased. It is necessary that the patient should be continually under the observation of the physician to avoid accidents under this method of treatment, but with care accidents are not met with.

* * *

SURGICAL SINS.—*Dr. Emory Lanphear* considers the following as surgical sins: First, operating in hopeless cases; second, delaying opinion as to the gravity of a disease; third, failure to operate in depressed fracture of the skull; fourth, pretending to be clean; fifth, undercharging in order to secure an operation; sixth, stealing patients; seventh, representing capital operations as trifling; eighth, keeping patients too long under chloroform. Unwise speed is bad; chronic surgery is worse.

MARYLAND

Medical + Journal.

PUBLISHED WEEKLY.

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MARYLAND MEDICAL JOURNAL,
Fidelity Building, Charles and Lexington Streets,
BALTIMORE, MD.

WASHINGTON OFFICE:
Washington Loan and Trust Company Building.

BALTIMORE, MARCH 11, 1899.

FAITH plays an important rôle in every calling. Life is too short to prove every step we take, and hence we look to some authority for results, and accept these statements without further verification on our part. The use of new chemical and medicinal products rests largely on the experience of others, and for this reason new remedies should be tried with a reasonable amount of caution.

Professor His, in some remarks before the Leipsic Medical Society, as reported in the London *Lancet*, says that the great majority of new compounds are recommended before they have been sufficiently tried, and as a consequence poor and even serious results follow. In the present degenerate days it is possible to secure testimonials galore on new products from physicians who have used these products very little, or in some cases have never seen them, and serious poisoning cases have resulted, says the speaker, from the blind following of such testimonials.

What is needed is an impartial test on animals by a skilled pharmacologist and also by a clinician of some reputation in the wards of a hospital before the drug is put on the market.

And here it may be said that some of the larger manufacturers follow this method, with the result that valuable therapeutic aids have been added to our armamentarium.

The advantage of using new remedies in hospitals is evident. Many cases can be treated at once under the same conditions and under constant supervision. The danger is of drawing hasty conclusions from an insufficient number of cases or with a mind already made up. There should be in every country a board of control who should pass on products before they are generally used.

In spite of these objections it is astonishing how some products, which are not definite chemical compounds, but are secret formulae or known formulae with a secret trick of compounding, have become indispensable to the practicing physician, who uses them in spite of every theoretical objection, because the results are good. With the activity of drug and manufacturing houses these questions are yearly growing more important.

* * *

It is very evident from even a cursory examination of the mortality tables that man is living longer than formerly, and **Postponing Old Age.** it is certainly due in part to his more general attention to matters pertaining to health. The subject, too, of keeping young and postponing old age is very much in evidence in medical and lay journals. The daily papers teem with rules for the suppression of the tell-tale wrinkle, and it must be said that, as a rule, these directions are usually harmless and tend to stimulate a spirit of temperance in all things, and, indeed, raise the standard of health.

For example, directions to prevent obesity may call for a certain kind of drug, but also rules for a strict diet are laid down, and a certain amount of exercise is called for. It is women usually who look out for these rules, and the woman's page, which is now so prominent in many papers, contains numerous directions how to become beautiful and stay beautiful. Woman will take almost any step within reason to preserve or improve her complexion, and the physician who wishes to interdict a certain kind of food or some form of dissipation need only say that it affects the complexion, and his directions are implicitly obeyed. Physicians who pay attention to what are considered the trifles in practice make many friends and soon grow popular.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending March 4, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	1	..
La Grippe.....	..	10
Pneumonia.....	..	25
Phthisis Pulmonalis.....	..	24
Measles.....	3	..
Whooping Cough.....	..	2
Pseudo-Membranous Croup and Diphtheria. }	31	2
Mumps.....	1	..
Scarlet Fever.....	6	..
Varioloid.....	..	..
Varicella.....	..	..
Typhoid Fever.....	1	2

Dr. Wolffhügel, professor of hygiene in the University of Gottingen, is dead.

Dr. G. Sims Woodhead has been made professor of pathology at Cambridge, England.

The Prince of Wales is the president of the National Association for the Prevention of Consumption.

The daily press announces that Wassermann, a pupil of Koch, has discovered a serum for the cure of pneumonia.

A hospital for consumptives has been established at Rutland, Vt., as a branch of the Massachusetts General Hospital.

Dr. G. C. Thieme has been appointed vaccine physician for the third ward of Baltimore, vice Dr. C. F. Blake, resigned.

Dr. B. G. D. Moxley, a life-time resident of Greenwich, Prince William county, Virginia, died recently, aged ninety years.

Dr. Alexander Laboulène, professor of the history of medicine in the University of Paris, died recently, aged seventy-three.

Dr. John E. Prichard, a physician, a native of Wales and for many years a resident of Baltimore, died at his home recently.

Dr. George A. Noble of Atlanta has opened a private infirmary in his city for the treatment of diseases of women and abdominal surgery.

The old mansion at Springfield Asylum, formerly occupied by Dr. Rohé and his family, is now to be used as a hospital for epileptic women.

Dr. William G. Jeffries, a prominent and well-known physician of Essex county, Virginia, died at his home, in Tappahannock, that county, last week.

Both houses of the legislature have passed a bill prohibiting the practice of Christian Scientists' cure in Oklahoma. The governor, it is said, will sign the bill.

Dr. Henry C. Scott, a native of Baltimore and since the civil war a resident of Ashland, Va., died last week at his home, aged seventy-one years. He was graduated from the University of Maryland in 1857.

Dr. Paulus A. Irving, president of the Virginia State Board of Health, states that there are at least 1000 cases of smallpox in Virginia. Nearly all of them are between a line that, if drawn from north to south, would strike Richmond and the seashore.

Dr. Edward P. Hurd of Newburyport, Mass., is dead. Dr. Hurd was a hard-working physician and had contributed extensively to literature and had made many translations from the French and German. His daughter practiced medicine in Baltimore several years ago.

The Rev. Father James O. S. Huntington, superior of the Order of the Holy Cross, a congregation of celibates in the Episcopal Church, having their mother-house at Westminster, Md., proposes the establishment of a new religious sisterhood, whose lifework would be to nurse consumptive patients.

Dr. Charles S. Buckner, a native of Richmond, Va., and for many years a practicing physician of Baltimore, died here last week, aged seventy-eight years. Dr. Buckner received his degree at the University of Maryland in 1843. He had practiced in South America and also in San Francisco, and had traveled extensively.

The subject selected for discussion during the next annual meeting of the Tri-State Medical Society of Virginia and the Carolinas, to be held during the fall of 1899 in Charleston, S. C., is "The Southern Negro," taking up the following points in connection with him: First, his hereditary tendencies, as learned from his race history in America and Africa; second, his racial fecundity, the influence of climate, city and country life; third, his race mortality, in childhood, in adult life, in city and in country; fourth, his recent erratic tendencies, the cause, and suggestions as to prevention.

Washington Notes.

Dr. Jessie Ramsburgh has been appointed substitute physician to the poor, with the usual compensation of \$30 per month.

Passed Assistant Surgeon Joseph A. Guthrie of the U. S. N. is in the city on a short leave from the arduous duties of the Naval Hospital at Norfolk.

At the District Medical Society Wednesday evening Dr. S. S. Adams read a paper upon the result in immunizing against diphtheria, and Dr. Lamb reported cases of cancer, with specimens.

The mortality in the District during the past week was 111. There were six fatal cases of diphtheria, one of typhoid fever, two of measles and six of grip. There are sixty-one cases of diphtheria and eighty-seven of scarlet fever in isolation.

The ninety-second meeting of the Medical and Surgical Society of the District of Columbia met at the residence of Dr. Llewellyn Eliot Friday evening, the 10th. Dr. Moran presented a paper upon "Puerperal Sepsis: Its Prophylaxis and Treatment," and Dr. E. L. Morgan, "Antitoxine in the Treatment of Diphtheria." The members and guests were treated royally by the host.

No deaths thus far have occurred from smallpox, and cases are being discharged from the hospital at about the same rate they are taken in. For a few days the epidemic appeared to be on the decline, but new cases are now being reported in greater numbers. One school building has been closed for disinfection, and many teachers and children will be kept under close observation. At this writing there are thirty-five cases in the hospital.

Book Reviews.

DIET IN ILLNESS AND CONVALESCENCE. By Alice Worthington Winthrop. Illustrated. New York: Harper & Brothers. 1899. Cushings & Co. of Baltimore.

Physicians who know little or nothing of the science and practice of dietetics are lacking in one of the most essential qualifications for successful practice. The most extensive formula and the best diagnostic skill cannot compensate for a too limited knowledge of the curative effects of diet in disease. Doubtless

more suffering is alleviated and diseased conditions more often corrected through the right application of the principles of dietetics than in the administration of drugs.

This book is not a scientific work, although portions of it are the result of scientific experience as gained by such observers as Pavy, Fothergill and other English authorities, while the author also acknowledges indebtedness to Dr. Thayer of the Johns Hopkins University.

The purpose of the work is thus set forth in the author's preface: "In a work on diet for invalids it is essential to consider the chemical constituents of food and to describe the processes of digestion—briefly, but with sufficient detail to aid an intelligent nurse in preparing and administering food for the sick and in observing its effects. A good nurse will never exceed or depart from the doctor's instructions; but there are occasions when her possession of accurate, even if limited, knowledge on the subjects of chemistry and physiology will enable a physician to give more definite directions, will assist him in the performance of his duties, and will add greatly to the comfort and well-being of the patient."

ESSENTIALS OF MATERIA MEDICA, THERAPEUTICS AND PRESCRIPTION WRITING. By Henry Morris, M.D. Fifth Edition, Revised. Philadelphia: W. B. Saunders. 1898. Price \$1.

This is the fifth edition of a little student helper which seems to have gained some popularity. In this edition much that is old has been omitted, and new parts have been added without materially increasing the bulk of the volume. The newer antipyretics are added, and the metric system is used because it has been adopted by the Medical Corps of the United States Army. The arrangement is one of drug classification rather than an alphabetical one which so many authors like. There are no illustrations. This set of books is very popular, as over 160,000 have been sold.

REPRINTS, ETC., RECEIVED.

Medical Education. By Leo M. Crafts, B.L., M.D. Reprint from the *Northwestern Lancet*.

The Physician in Practice. By Leo M. Crafts, B.L., M.D. Reprint from the *Journal*.

Holocain in Ophthalmic Surgery; Its Superiority Over Cocaine; Its Therapeutic Value. By Hosbit Derby, M.D. Reprint from the *Archives of Ophthalmology*.

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Original Articles.

A NEW METHOD OF DEMONSTRATING THE PRESENCE OF MALARIAL ORGANISMS IN THE BLOOD.

A PRELIMINARY NOTICE.

By *Charles E. Simon, M.D.*,
of Baltimore, Md.

WHILE the great majority of observers are agreed that the best results in the examination of malarial blood are obtained by making use of fresh specimens this method is not always applicable, for, although such preparations will usually keep quite well for several hours, especially if a little vaseline or melted paraffin be placed along the edges of the cover-glass, so as to guard against evaporation, the time-limit is often too short for the purposes of the general practitioner. He is, therefore, forced to resort to the use of dried and stained specimens.

For staining purposes a large number of methods have been suggested, the dye which is most commonly employed being methylene-blue, with eosin as a contrast-stain. The pictures which are thus obtained are sometimes good and sometimes bad. Very often the preparations contain such an appalling amount of precipitated methylene-blue as to be actually useless. In others the red corpuscles are so faintly stained that the search for the organisms is most trying to the eye. With some methods, furthermore, the time which is required for hardening and staining is entirely too long for practical purposes.

For routine work the method which

has recently been proposed by Dr. Fitcher is certainly the most convenient and to be preferred to all others with which I am acquainted. His procedure is the following: The air-dried blood-films are fixed for one minute in a 1 per cent. alcoholic solution of formalin, and, after draining off the excess, are stained in a solution of thionin of the following composition:

Saturated solution of thionin in 50 per cent. alcohol, 20 c.c.

Two per cent. aqueous solution of carbolic acid, 100 c.c.

After staining for thirty seconds the specimens are washed in water, dried between filter paper and mounted in Canada balsam or oil of cedar. The red corpuscles are stained a light lavender, while the nuclei of the leucocytes and the malarial organisms are colored a purplish red. The method is thus both expeditious and yields good results. I have found, however, that, owing to the comparatively faint color of the red corpuscles, the eye-strain, with this method also, is not inconsiderable, and that it is likewise almost impossible to obtain specimens which are free from precipitated pigment. This is unquestionably not present in such large amounts, as is so often seen, when methylene-blue is used, but nevertheless disturbing, and especially so to the unexperienced, who will frequently mistake bits of pigment for extracellular organisms. The albuminous film, moreover, which so constantly overspreads the whole specimen like a veil when formalin and alcohol are used as fixing reagents, with subsequent staining in alcoholic and aqueous solutions, and the tears and rents in its surface, which result from washing, are likewise annoying.

Some time ago, while examining specimens of blood for the presence of glyco-gen, according to Ehrlich's most recent method, I was much impressed with the clean appearance of the specimens and the resemblance of the color of the red corpuscles to that observed in fresh blood. It occurred to me that this method could also be well employed for the detection of the malarial organism, and that by its use all the difficulties attaching to the other methods would be overcome. The results which I have thus far obtained have been entirely satisfactory, and I have no hesitancy in recommending the method for general use.

In my first experiments the blood-films were not fixed at all, and the red corpuscles retained their normal appearance. But during the very cold weather not long ago, when the stage of my microscope was very cold and many of my reagents were frozen, it was observed that in the unfixed specimens the hemoglobin dissolved out from the red corpuscles almost as soon as the specimen was placed upon the stage of the microscope. Since that time I have occasionally succeeded with unfixed specimens, while at other times, without any apparent reason, the dissolution of the hemoglobin occurred. For the present, then, I should suggest that the air-dried blood-films be fixed for a few minutes in absolute alcohol, but I trust that ere long I shall be able to modify the method such that fixation will not be required. After drying, the fixed blood-films are then exposed to the vapors of iodine for from ten to fifteen minutes. To this end I place some metallic iodine in a small glass dish, provided with a well-fitting cover, and the specimens, blood-side down, upon little tripods of glass or a similar contrivance, so as not to come in direct contact with the iodine. When the specimens present a well-marked yellow color they are removed, carefully dusted off with a camel-hair brush and mounted in a drop of syrup of levulose. The color of the red corpuscles is now very much like that of fresh blood somewhat intensified, and the malarial organisms appear as in fresh specimens. If the finger has been carefully cleansed and clean glasses have been

used no foreign material will be present to interfere with the examination. Unfortunately the color of the red corpuscles fades after twelve to twenty-four hours, so that the preparations cannot be preserved, but as the object of the examination has been accomplished when the organisms have been found this is immaterial.

For teaching purposes the method will be found very convenient at times when fresh specimens of malarial blood cannot be readily procured.

OUR MATERIA MEDICA.

By Joseph T. Smith, M.D.,

Associate Professor of Medical Jurisprudence and Hygiene and Clinical Medicine, University of Maryland.

READ BEFORE THE CLINICAL SOCIETY OF MARYLAND,
MARCH 3, 1899.

In a short time the committee will meet to subject the United States Pharmacopeia to its decennial revision. Very great and unusual interest attaches to this revision. Some of the societies have had it under discussion, and our materia medica is called to your attention this evening in view of its exceptional importance.

Many reasons have combined to bring the subject prominently before us—the coming revision, the growth of the new departments of serum and organotherapy, the experimental activity in regard to old and new drugs, the development of physical and natural therapeutics to an extent heretofore unknown, and the labors of the pharmacist and manufacturer in furnishing us with cheaper drugs in forms more available for use.

In order to stimulate greater interest in the approaching revision of that book (The United States Pharmacopeia) the Medical Society of the State of New York has sent out, through its committee, six questions, which doubtless many of you have received, tending to view the drugs and their arrangement from the standpoint of the physician, with the result, we trust, of having the new United States Pharmacopeia conform more completely to the needs of the physician and surgeon. The questions proposed are as follows:

1. That all drugs and preparations, not now prescribed to any extent by physicians, be dismissed.

2. That all chemical drugs necessary to other preparations, but which are not directly prescribed, be placed in a list apart from the body of the work.

3. That doses be included in the next revision.

4. That doses be placed in the index rather than in the text of the book, in order to readier reference and to avoid making them official.

5. That a section be devoted to giving reliable information concerning new remedies, without in any sense making them official.

6. That an annual supplement of a few pages, for the purpose of continuing similar disinterested information concerning new drugs, be issued.

I think we all recognize the value of a working standard, an official guide, which shall have eliminated from it many drugs of doubtful value and all that have proven themselves, upon trial, to be useless. The question of value, while not always easy to determine, is not very difficult if we take as our guide "All drugs and preparations not now prescribed by physicians." Such a standard might be a revised pharmacopeia, or, if the pharmacists desired to have that devoted to too great an extent to experimental drugs and methods of preparation, a committee could readily be secured from physicians and surgeons to form a standard as may be required. This, however, would hardly be necessary, as, doubtless, the pharmacopeia could be modified to meet the demands of all.

Such a standard would embrace only those articles that had the sanction of usage, either in special departments or generally; it might be thoroughly revised every ten years, and a supplement issued every three years. It would be an exposition of the drugs needed and in use by the profession. The teacher would find a work of the kind of inestimable value; he could then confine his attention to the drugs in use; he could carry on and develop his instruction in regard to them, instead of, as is now too often the case, being obliged to devote time and energy

to matters of but little interest and of no value. If the State examining boards could be induced to confine their questions to the field covered by such a standard it would add to their efficiency and popularity. It ought to cause more uniformity in the prescribing of drugs and in helping us to control the avalanche of new remedies continually pouring in upon us.

The most difficult, important, and, at the same time, necessary, decision would be that of elimination. The number of drugs recognized—by that is meant published in text-books or large works of reference—is much greater than those in use. Thus in Hare's "Practical Therapeutics" there are 383 articles; in Butler's "Materia Medica" there are 457, and in Shoemaker's there are 675. These represent only such as have special attention called to them by being printed in large type, many more, of presumably minor importance, being in small type. With our present United States Pharmacopeia as a standard, most of these must find a place, but it is evident that useless drugs are to be found among them, and we call attention to a few as suggesting the lines that might be pursued in an elimination.

Mezereum might with advantage be dispensed with. Hare says: "It is never used internally except in compound decoction of sarsaparilla." Butler says: "Internally, it is seldom if ever used alone."

Musk is practically abolished. Shoemaker says: "Its high price and the difficulty of obtaining an unadulterated article take it out of the ordinary range of medicines." Butler does not treat of it at all. Hare says: "Very little of the musk for sale in the shops is pure, and most of it is not musk at all."

Pentol can hardly be said to be recognized by us. Hare remarks: "Pentol is an anesthetic which so far promises very little." Butler says but little concerning it. Shoemaker quotes Dr. D. Cerna as saying that he "does not regard it as a safe or even efficient anesthetic."

Sanguinaria and stillingia may now be looked upon rather as curiosities, and sarsaparilla can hardly, on account of a pleasant flavor, be worthy of a place amongst our therapeutic agents.

Taraxacum represents a class of drugs which, while they may be possessed of some virtues, are obtained with so much difficulty as to render them almost useless. Squibb says: "Of the large quantities of dandelion root in the market, very little is fit for use, and the difficulty and expense of getting a root which has been taken from the ground at the right season for its medicinal activity are constantly increasing. Many physicians now regard it as worthless, when such a charge only lies against that which is not collected at the proper time." Is the drug of sufficient importance to be retained under such circumstances?

While the elimination of drugs is difficult, to have a proper control over the introduction of new ones is still more difficult. The possible additions to our *materia medica* are illimitable; an infinite number of combinations can be made with the organic and inorganic materials at our disposal, and some standard is needed that, through it, unusual restraints can be secured, and that only after the most searching tests and varied clinical experimentation shall such be admitted to a place. Our daily mail attests the activities that are at work. A few of the new combinations are made with a desire to aid us, but a large number have no such end in view; indeed, we can almost retain in the memory the really valuable additions that were made last year. The activities do not need restraint so much as that they be given a proper direction. If more unanimity could be secured in the use of those drugs known to be valuable there can be no doubt but that the manufacture of many useless combinations would cease and no encouragement be given to add such to an already full treasury.

During the past year our *materia medica* has had added to it many articles; it has been a very fruitful year in numbers; the reason is not hard to find; the ease with which such additions can be made cause many poorly equipped for work to enter the field. As important additions are made an effort should be at the same time made to eliminate. We are prone to add that which is new and go no farther; but it is no less desirable to get rid of the

materials which a riper experience has shown to be more or less valueless. We should have prominently before us the keeping of our drug list within usable limits.

We have passed the drug limit, and wholly new materials and methods clamor for recognition.

Serum and organo-therapy require new articles. These are acknowledged by all, and satisfactory progress has been made in their development, so that we must regard some of them as permanent additions. Dr. Solis-Cohen says: "He has found the suprarenal extract the most reliable remedy for raising blood-pressure, the thyroid extract very useful in restoring the functional activity of the skin and kidneys, and the thymus extract a valuable means of improving general nutrition." Dr. J. V. Shoemaker says: "As the active principles of all plants have not yet been isolated, it need be no wonder that in a new field * * * this problem for most substances remains unsolved. * * * The active principle of the thyroid gland is believed to be iodothylin. * * * Schaefer and Oliver have obtained from the medullary portion of the suprarenal bodies an organic principle. * * * He here points out a new field of inquiry just opening up, and which promises to add other new agents—the active principles of our newly-found organic remedies.

Dr. F. B. White, in his report of the experiments "Upon the Germicidal Properties of Blood Serum" as conducted in the pathological laboratory of the Massachusetts General Hospital, shows the growing importance of the subject, and opens up for our thought and consideration a much wider field than was dreamed of. He says: "The source and chemical nature of the germicidal substance in the blood, the so-called 'alexin,' is still an open question. * * * The white corpuscles of the blood seem to be intimately concerned in its production." And again: "In general, a serum which kills one kind of germ does not on that account kill all kinds of bacteria. * * * It appears that the serum of an animal has a definite specific power over certain bacteria, and not that the serum contains an antiseptic

substance which injures all bacteria more or less."

In reading these statements, it is easy to see what possibilities are here opened up for an increase in the articles of the materia medica. If the polynuclear leucocytes produce the "alexin," if we can produce a hyperleucocytosis by injections of tuberculin, etc., and if we find that the serums from different animals differ in the character of the germicidal substances they produce, the future may have in store for us an entirely new source from which remedial products may be supplied.

Experimental activity in regard to both old and new drugs is marked at this time. Probably the most conspicuous of the newer activities is that of one firm in the substitution of acetic acid as a menstruum instead of alcohol in the making of a large number of fluid extracts. In regard to the matter, in a personal letter, they write: "We do not hesitate to say that they are reliable in every respect, being of the same strength as the alcoholic extracts of the pharmacopeia. On the whole, these extracts are more compatible and more adapted to prescription work than the alcoholic extracts. Their incompatibility may be practically limited to mixture with alkaline hydrates, carbonates and Rochelle salt. They are far more miscible one with another than the alcoholic extracts. Each extract contains a sufficient excess of the acid to pickle the organic matter in the solution, and they should be, and, in our opinion, are permanent."

Such a substitution has many points to commend it; but no clinical opinion can as yet be formed, as they have been little used, two of our largest prescription stores, not having had any calls for them, had none of the extracts on hand.

Iodine is still looked to to furnish new compounds, and iodopin (iodine and Sesame oil) is brought to our attention.

Albumen, to which possibly the work with the serums has given special prominence, has recently been called upon to form a basis for new combinations, among which may be noted one with iodine, the eigon group, alpha, beta, etc., with ichthyol, ichthalbin; with iodoform, iodoformagen; with silver, largin.

Creosote in combination with phos-

phoric acid has given phosote, which is said to do away with ingestive difficulties—quite a broad claim.

Bismuth, tannic and gallic acids have given us isutan, tannapine, etc.

The older drugs have not been altogether neglected, and the *Medical Record* well observes in an editorial that "It is a sign of new and better things when students are to be found turning to the investigation of the relationship of the physiological action of a drug to its chemical constitution." A more careful study of and intimate acquaintance with the drugs we have is more to be desired than the addition of new ones. Moore and Row have set a good example in this direction in discussing the physiological actions and chemical constitution of piperidine, conine and nicotine. They find "the three alkaloids are very similar in physiological action, although the intensity of action varies." The résumé of Dr. S. E. Jelliffe on the "Pharmacognosy of Ergot" is an excellent one. Three peculiar bodies are found—ergochrysin, secalin and spacetoxin. The point of interest is that the latter is the most important, and that in union with ergochrysin it forms chrysotoxin. This is active in causing the circulatory change in the cock's comb, resulting in dry gangrene, and it produces uterine contractions in pregnant animals with a resulting abortion. Very much will have been gained if the active agents can be isolated from ergot and a stable compound obtained. This is in line with the activities that are so much needed.

The field for the increase in our resources is still further widened by what Hayem is pleased to call physical and natural therapeutics. Here we draw our supply of remedial agents neither from the animal nor vegetable world, but we invoke the aid of the forces of nature. In connection with this matter Dr. Solis-Cohen directs attention "to the influence of high altitudes in increasing the hemoglobin and the number of red blood corpuscles." The work in this direction is destined to occupy no little of our time and attention.

In view of what we have tried to outline it is evident that our materia medica is in danger of becoming too cumbersome to

be efficient, of being unsatisfactory from the confusion produced by numbers, and of being regarded as less valuable than it is from the large number of agents whose activities are but little known. We look to the new revision of the pharmacopeia to help avert the dangers, as physicians and surgeons, in our individual capacities, we can accomplish much by withholding our sanction from a remedy until its value has been assured, and we can discourage the practice among those with whom we are brought into contact of purchasing drugs and remedies of which they know nothing, as this tends to create a popular demand and a resulting fictitious usage.

THE SCHLEICH METHOD OF GENERAL ANESTHESIA.

By E. J. Bernstein, M.D.

READ BEFORE THE CLINICAL SOCIETY OF MARYLAND,
MARCH 3, 1899.

DR. WILLY MEYER is authority for the assertion that about one in every two thousand chloroform anesthetics and one in every ten thousand ether anesthetics results fatally. However accurate this may be, we do know that accidents occur occasionally, and one can never tell in a given case whether it will befall this one or not. Many have given chloroform or ether or both for years and never seen an accident; still the facts are such as above stated. It is just this uncertainty which has led so many to experiment for a safer anesthetic, the results of which are the A. C. E. and Vienna mixtures of chloroform one part, ether six parts.

Schleich, who in 1894 did so much for local anesthesia by his solutions of minute quantities of morphia, cocaine and sodium chloride to be injected into the skin, undertook the problem in a thoroughly scientific manner, and found as a result of his work that anesthesia was dependent on two conditions—the surrounding temperature and the relation of the maximum evaporation or boiling point of the anesthetic.

The more rapidly volatile—i. e., the lower the boiling point—the more rapidly is the drug eliminated, and if the boiling point and the temperature of the body

were identical and respiration were efficient, no narcosis could be induced. It is only when an excess of the drug is absorbed and carried to the brain by the blood that we accomplish our end.

This is the case when using ether, whose boiling point is 93° F., in a temperature of 100.4°, and it is only when we crowd the drug and force it to expand and distend the alveoli that narcosis ensues. It is this obstruction to respiration which causes a certain degree of cyanosis. Another result is the excessive secretion of mucus and the frequent occurrence of subsequent pneumonic infiltration. The pressure of carbonic acid gas accumulating in the blood partially overcomes the tension of the ether vapor in the alveoli and permits its escape—then cyanosis disappears and true ether narcosis begins. Death from ether on the table is, therefore, impossible so long as respiration is efficient.

Ether is so rapidly converted into vapor that it would not enter the alveoli at all were it not for the fact that the carbonic acid gas overfills them. From the high boiling point of chloroform the absorption is greater than the need, and so in leaving the organism overtaxes the parenchymatous organs. Now, when chloroform is used, the boiling point or maximum evaporation of which is 149°, so much more is absorbed than can properly be eliminated by the lungs, and the overplus is forced upon the heart, kidneys and liver for elimination. (This explains the deleterious after-effects on these organs.) Narcosis is here profound.

In bromide of ethyl we have similar conditions. Its boiling point is slightly over that of the body. Anesthesia is produced by crowding the drug. It is an ideal anesthetic for short operations, especially those done about the nose and mouth, but it is administered with such a degree of brutality that makes one hesitate. As Dr. H. A. Hare says: "Surgeons become callous and indifferent as to the after-effects of anesthesia, and think only of the perfection of their immediate results. It is the physician who has to care for the shocks and ravages on the nervous system."

From the foregoing it is seen that a

safer anesthetic is such a one in which the amount eliminated during expiration nearly equals that absorbed in inhalation.

Schleich was the first to show the reason for the greater safety of the Vienna and A. C. E. mixtures; only it is safe to say that they are not mixtures, but real solutions, though Weiding of New York says the chloroform in the new solutions is not free in the mixture, but that the ether is in its free state. He says that solution No. 1 contains 53.7 per cent.; No. 2 contains 44.6 per cent., and No. 3, 36.96 per cent. of free ether. This led him and Meyer to experiment with such a solution that all the ether shall be in combination, and they produced what they call molecular solutions. They are mixtures of 43.25 per cent. (by volume) of chloroform to 56.75 per cent. (by volume) of ether. Schleich maintains that his object is brought about by the use of a combining agent—petrollic ether—whose boiling point should be 65° C. He discovered this agent after numerous experiments, and employs it because he is able to use larger doses with minimum serious effects, and it diminishes the action of the chloroform. It should be administered, or rather it is best administered, by the towel and paper cone or Esmarch's inhaler, covered (except for a central round opening) by tinfoil—that coming in tea chests is probably the best. It is given in drop doses about 1.5 grammes every half minute. One should note the quantity used and watch the respiration. The latter is the advantage in this anesthetic, for it is only necessary to observe this during the narcosis. Real danger lies in its effect on respiration, the frequency of which is invariably increased, commonly between 30 and 40, with a minimum rate of 24 and a maximum of 65. Deep and frequent respirations are a warning that the patient needs more free air; slow and superficial respirations are of worse purport and mean that the anesthesia should at once be discontinued and the usual remedies for failing respiration employed. The contracted pupil is the natural state in sleep, so that dilatation indicates that the cone should be removed and more oxygen should be admitted. It is found that the corneal reflex is often abolished be-

fore the anesthesia is complete. Operation should not be undertaken before the narcosis is deep—not because dangerous, but because it lessens trouble from reflexes. Bad results are due to faulty administration.

For an operation lasting half an hour from 8 to 10 drachms of No. 1 solution would be used; if for an operation requiring longer time, use one of the other two solutions, having a higher boiling point, as less anesthetic will be required and narcosis more profound. Practically most men have disregarded the No. 2 solution, and have used either No. 1 alone or with No. 3. The latter is especially fitted for lengthy operations on fever patients.

Patients go under the anesthesia promptly, from two to ten minutes being all that is required; as an average but six minutes will be required. They awake to full consciousness in an average of fourteen minutes, with very little nausea or other discomfort; in fact, they often go home after such an anesthetic. There is no stage of excitement and no tendency to irritate the bronchial mucous membrane. The pulse has good tension and never increases perceptibly, but may decrease. Stillman and Greely report forty-four anesthetics with an average of ten and one-half minutes to produce full sleep, and consciousness returned in an average of fourteen minutes. So far no deaths have been reported from its use, though, like all other anesthetics, it is an element of danger. Schleich himself reported 1000 cases six months ago, and fully as many have been reported by others.

The formulae are as follows:

No. 1. Boiling point, 38° C., 100.5° F.; chloroform, 15; petrollic ether, 5; sulph. ether, 60.

No. 2. Boiling point, 40° C., 104° F.; chloroform, 15; petrollic ether, 5; sulph. ether, 50.

No. 3. Boiling point, 42° C., 107.5° F.; chloroform, 10; petrollic ether, 5; sulph. ether, 26.6.

LUMBAGO.—Lumbago, or what the Germans call "Hexenschuss," is a painful, but not dangerous, ailment. Many remedies have been suggested, but few equal the application of heat.

Society Reports.**CLINICAL SOCIETY OF MARYLAND.**

MEETING HELD FRIDAY, MARCH 3, 1899.

THE meeting was called to order by the vice-president, Dr. B. B. Browne.

Dr. J. M. Hundley reported "Two Cases of Chronic Diarrhea Due to Ulcer of Upper Rectum" (see page 139).

Dr. E. J. Bernstein read a paper entitled "The Schleich Method of General Anesthesia" (see page —).

Dr. Joseph T. Smith read a paper entitled "Our Materia Medica" (see page 166).

Dr. C. Urban Smith said he thought this subject a very important one, indeed, and that our materia medica is certainly a very unfortunate combination. He says it is very hard to tell what to eliminate, because we are likely to eliminate many drugs that are of great use, but they have not been studied carefully, and their general action upon the system is hardly known. The physiological action of the drugs is the most important part, and when they are so studied by the pharmacists we will then be able to see the advantages and disadvantages of the different drugs.

Dr. McConachie said he thought the author of the paper was correct when he said our materia medica is in danger of becoming too cumbersome. He says there must be a cause for this, and he thinks it is due to the fact that we want something to relieve something, and have not quite made up our minds what we intend to relieve. The manufacturers have noted this uncertainty in diagnosis, and if medical men will carefully study the nature of their cases and make an exact diagnosis, not for the sake of the diagnosis, but for the sake of applying appropriate treatment, the manufacturers would largely get out of business. What we need, he says, is something, not for the operator or for the doctor, but something appropriate and safe for the patient.

Dr. A. K. Bond says he believes thoroughly in drugs, but he believes still more in the power of the human body to heal itself. He says a great many people think

of man as a test-tube with a certain amount of disease germs and poisons in him, and that certain drugs must be administered to either kill or cure him. He believes the best doctor is the one who gives the patient a chance to get well of himself.

Dr. W. J. Todd says it is hard for many men to rise above their early teachings, and very often they get the idea that they must use the drugs simply because they are in the materia medica. He said he would only suggest what he considered an appropriate quotation: "Approve all things, and hold fast that which is good."

Dr. Robert Reuling presented the record of a "Case of Hemiplegia, Showing Hemianesthesia and Muscular Atrophy, Due to an Intracranial Lesion."

Dr. Paton said he was sure the society was very much indebted to Dr. Reuling for his very interesting presentation of this rare case. He said he wished all could be made to feel how very important the cases of hemiplegia are. The question of diagnosis is a very important one for the patient, because that involves the question of treatment and prognosis, and really there is no more difficult diagnosis to be made than the diagnosis between the functional and organic hemianesthesia. Dr. Paton said that the atrophy referred to in this case was a very interesting point, and one that has been under dispute for a very long time. He said it had been referred to by certain writers as being probably due to the disturbances in the cord, due to adhesions that followed the cerebral lesion. The question has been debated very seriously, and recently the question has been taken up anew. A great many think that these atrophies after cerebral lesions are really due to latent disease in the joints, and not due to the cerebral lesion. It is also believed by some that they are probably due to paralysis of the vascular system.

BALTIMORE MEDICAL AND SURGICAL ASSOCIATION.

MEETING HELD MONDAY, FEBRUARY 27, 1899.

THE meeting was called to order by the president, Dr. C. Urban Smith.

Dr. W. B. McDonald was elected to membership.

CONVERGENT STRABISMUS.

Dr. Samuel Theobald said the two prominent causes of convergent strabismus are the paralytic process of the external rectus and the so-called concomitant squint. He says the usual form of convergent squint is that which is always in one eye, but, fortunately for the individual, we sometimes find an alternating squint, indicating that the eyes squint alternately. It is often very difficult to detect the presence of a squint, and one must rely upon another test than the judgment, the simple color test being almost always trustworthy. Often, he says, eyes appear to have a convergent squint when there is nothing of the kind present.

Dr. Theobald says there are different views being held as to the origin of amblyopia in connection with squints—whether it is a consequence of the squint, whether it antedates it, or whether it is the cause of the squint. Some maintain that it is a congenital defect. His own views are that amblyopia is not the cause of the squint, but a consequence of it. If the amblyopia is a consequence of the squint it is apt to become more and more prominent, and it is a very important matter to deal as early as possible with the squint, in order to prevent the further development of the amblyopia. As to the treatment of squints, they can be dealt with in two ways—one by glasses and one by operation in combination with glasses. In almost all of these cases operative treatment is what one must resort to. Some surgeons have advised advancement of the muscle, but it is generally believed that tenotomy is the safer and more exact way of dealing with these cases. It is much more difficult to determine what is to be the result of the advancement of a muscle than of a tenotomy. The operation for squint is practically free from danger, done under cocaine, and almost painless. He says he does not hesitate to operate just as soon as he sees a case of convergent squint, even in comparatively young children, although this view is not held by a great many ophthalmologists.

Dr. A. K. Bond said he felt very much indebted to *Dr. Theobald* for what he had said. He had a little child referred to

him quite recently for squint, and he advised the parents not to have any operation performed until the child was considerably older, but he believed, from what *Dr. Theobald* had said, it was an unwise plan.

Dr. Bernstein said he did not think *Dr. Bond* need feel that he had given unwise advice, as a great many surgeons hold to the opinion that it is unwise to operate upon a child unless under exceptional circumstances. When the squint is very marked they do operate occasionally, but, as a rule, they do not operate upon concomitant squint until over ten years of age, and attempt to cure or treat the squint in the meantime by the correction of the hypermetropia. He said he knew of instances where patients had been spared an operation altogether by this treatment.

Dr. McConachie said he thought most ophthalmologists would agree with what *Dr. Theobald* had said with regard to the origin of convergent squint, and that his own observations had led him to believe as *Dr. Theobald* does, that amblyopia follows the squint and is not antecedent. As to the treatment, too, he thought nearly all would agree with *Dr. Theobald* that it is best to deal as early as possible with the squint in order to prevent the advancement of the amblyopia.

Dr. Harlan said the subject was an exceedingly interesting one and, at the same time, a very large one. For his own part the more he learned about squints the less positive he feels about his knowledge in regard to them. He said he thought the cases would simply vary, and the treatment must vary, and that, in his opinion, there is no one theory that we can fit all cases of squint to.

SOME RECENT WORK IN OPERATIVE SURGERY.

Dr. John D. Blake said the case he wished to relate was one particularly interesting, he thought. The patient was about thirty-three years of age, approaching pregnancy, within a few days of the tenth month. At the suggestion of the patient's physician *Dr. Blake* said he made an examination with a view to extra-uterine pregnancy. Upon vaginal examination he found the os about the nor-

mal size of a multipara, somewhat softer. The os was somewhat patulous, so much so that the finger could be made to enter. At the time of operation upon examination he found that the finger could easily be passed into the uterus and that the uterus was entirely empty. He then made an incision in the abdominal wall, exposing an immense tumor; passing his hand well up under the rib he lifted out the entire mass, the tumor containing the child. This tumor showed that it was muscular in character, while its walls were extremely thin, and it seemed that it had started off at right angles with the uterus. He immediately excised this muscular sac, and passing his hand through the membrane lifted out a child weighing ten and one-half pounds, afterwards removing the entire sac. This sac was muscular in character, and as the child was removed it feebly contracted down to probably one-fourth its size. The child lived about fourteen days, when it developed some pulmonary trouble and died. The mother continued to improve, the most peculiar development in connection with the case being noticed the day before the patient was permitted to leave the hospital.

Upon examination he discovered in the vaginal margin a small opening which ran back into the posterior portion of the canal. Examining further, he found a small os, about the size of an os of a girl ten or twelve years of age. Dr. Blake said it was evident to him that he was dealing in this case with a double uterus, and the fact of having had to deal with that showed that this was a very diminutive uterus, with an exceedingly long neck, and one with extremely thin walls. He said he had seen a number of pregnant uteri and observed their thickness, and this one he supposed to be about one-third the normal thickness. The patient is doing well now, has recovered her strength, and says she does not feel any worse. Dr. Blake says he is quite positive she would never have been able to give natural birth to this child without operative measures.

Dr. Blake then referred to two cases of gall stone, for which he had done the typical cholecystotomy. In one case he

removed twenty-four and in the other seven stones. He says that in doing the typical operation the danger in sewing up the gall bladder is that there may not be drainage from the gall bladder into the bowel, and that there may be an accumulation of fluid in the gall bladder, causing overdilatation of its walls. Dr. Blake says that of the number of gall-stone cases he has operated upon these are the only two in which he has closed up the gall bladder entirely.

Dr. Sellman asked if the uterine appendices were attached to the tumor which he removed in the first case.

Dr. Blake replied that he removed one of the ovaries with the tumor.

Dr. Chambers said he thought the case an interesting one and remarkably successful surgically.

Medical Progress.

HEMIANOPSIA AND BLINDNESS FOLLOWING UTERINE HEMORRHAGE.—A. R. Amos (American Journal of the Medical Sciences) reports the case of a woman, aged fifty years, extremely anemic after repeated uterine hemorrhages, who suffered from right hemianopsia, coming on suddenly with dizziness and headache. Subsequently she underwent an operation for removal of a uterine fibroid, and three days later became entirely blind. Subsequently central vision returned so that she could read Jaeger test-type at fourteen inches, but only one letter at a time, the rest of the field of vision remaining entirely blind. The restored field was not over five degrees in diameter. The ophthalmoscopic appearances remained normal throughout. The case is probably one of double homonymous hemianopsia from two lesions symmetrically placed, occurring at different times.

* * *

FOREIGN BODIES IN THE EAR.—Hummel (Therapeutic Gazette) makes the following deductions: First, the relation of the normal ear canal to inanimate foreign bodies is entirely without reaction—that is, a foreign body in the ear does not, *per se*, endanger the integrity of the ear; second, hasty endeavor at removal is not only unnecessary, but can become very

injurious; third, in all cases not previously interfered with (with few exceptions) foreign substances can be removed from the ear by syringing; fourth, general practitioners should never employ anything but the syringe in endeavoring to remove foreign bodies from the external auditory canal; fifth, instrumental removal of foreign bodies from the ear should be effected only by one fully able to examine the ear with the otoscope and acquainted with every operative manipulation in this region.

* * *

TYPHOID FEVER AND INSANITY.—Paris (University Medical Magazine) narrates the case of a woman, aged forty-four years, who had been insane for several years with ideas of persecution and grandeur. During the subsidence of an uncomplicated attack of typhoid fever the insane ideas became less manifest and less fixed. The patient suffered a relapse of typhoid fever, with severe symptoms, and upon its subsidence she seemed perfectly sane. As the case had been regarded incurable the amelioration was considered temporary only, and the patient was confined in the asylum for some months longer. At the end of three years, however, she was still entirely sane. Hyvert also narrates the histories of three cases of insanity in which typhoid fever occurred. Two of the patients, both women, aged twenty years, completely recovered from their insanity. The first had suffered from acute mania for two months, and the second had been weak-minded and had had hallucinations and insane ideas.

* * *

OPHTHALMIC ZOSTER DUE TO POTASSIUM IODIDE.—Jacquet (American Journal of the Medical Sciences) presented to the Société Médicale des Hôpitaux de Paris a patient affected with a chronic blennorrhagic rheumatism, who, after the daily administration of two grammes of iodide of potassium for four days, developed a slight ophthalmic zoster, accompanied by neuralgia of the right facial nerve. That the zoster was due to the iodide was probable from the fact that four years previously the administration

of the same dose produced, at the end of some days, a left facial paralysis which lasted six weeks, and two years later the ingestion of the iodide was followed by severe dorso-lumbar pains.

* * *

THE TREATMENT OF RACHITIS.—Dr. Lor (in the American Journal of the Medical Sciences) insists upon proper feeding and sea baths, either hot or cold, according to the season. He prescribes phosphorus systematically as follows: Phosphorus, 0.01; lipanine (pure olive oil with 6 per cent. of oleic acid), 30; powdered sugar, 15; powdered gum, 15; distilled water, 40. Of this a teaspoonful a day represents 1-64th of a grain of phosphorus. Large children of good digestion may take the drug dissolved in cod-liver oil. No serious disturbances have followed the use of this remedy, but it is well to omit it for four days out of every twelve.

* * *

DIABETES MELLITIS IN A TEN-YEAR-OLD GIRL.—Haushalter (University Medical Magazine) reports a most unusual case of diabetes in a young girl, aged ten years. The glycosuria amounted on an average to about 122 grammes of sugar a day, during an irregular observation of seven months. Polyuria was not excessive. The subjective manifestations consisted of thirst and polyphagia, which were not marked. Various abscesses developed on the lower extremities, the disease progressed, the child became marantic and died at the end of about two years, despite all treatment.

* * *

DANGER OF THE NASAL DOUCHE.—Lichtwitz (British Medical Journal) advises that the nasal douche should be used only in cases where there is increased secretion or crust formation; in fact, where something has to be removed. The dangers in the use of nasal douches are as follows: First, disturbance in the sense of smell due to the action of chemicals on the nasal mucous membrane; second, headache; third, suppuration in the middle ear.

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BALTIMORE, MARCH 18, 1899.

SIR ARCHIBALD GEIKIE, the noted English geologist, in a recent address to college students, strongly urged that **Physicians and** along with scientific work, **Climatology.** they should not neglect the literary side of their education. His advice seems equally applicable to the rural practitioner, who, too apt to become wholly absorbed in a purely medical routine, loses golden opportunities to be of service to his community, broaden his mental range, and acquire interests which, in after life, prove valuable sources of solace and refreshment.

As a stimulus in this direction, attention is called to the admirable publications of the Maryland Geological Survey, under the editorship of William Bellock Clark, the State geologist. Geology has intimate relations with sanitary improvements, drinking-water resources, climatic and health data, etc., and Maryland, with her unusually diversified physiography, stands only at the threshold of future possible development.

A country physician may easily bring to bear his trained powers of observation in noting and recording the destructive physical characteristics of the region which he traverses in his extensive daily rounds, in keeping accurate weather reports in connection with the

morbidity and mortality statistics of his locality, etc.

The two volumes of this Geological Survey already published should promote a new era in the social and industrial recognition of our great natural resources, attract capital to our borders, stimulate the growth of rural communities, advance sanitation and yield returns of the widest importance to the people of the State.

* * *

THE annual report of the State Board of Health for the past year has been made public and it is a great credit to that body. There are decided evidences that the secretary has given the work much time and careful thought. One of the advances to which this Board may point with pride is the infectious-disease notification act, which, together with the act regulating the practice of midwives, has already shown its good effects. Another great step forward is the partial, at least, enforcement of the law to return all births and deaths outside of Baltimore, and the secretary has been able to build up some valuable statistics on the records already obtained.

Local boards of health have been organized in all the counties, and separate health officers hold sway in some of the larger towns, and even with their inadequate pay, and the risk of becoming unpopular, they have accomplished much good.

The statistics of the State so far collected show that typhoid fever, along with the infantile diseases, ranks next to tuberculosis in the mortality tables in this State. Diphtheria and smallpox both receive attention in this report, and the necessity of vaccination and revaccination is dwelt upon. The great need of a suitable State hospital for consumptives is spoken of, and reference is made to the one small institution which has done good work in proportion to its facilities.

The secretary is to be heartily congratulated in bringing out a report which will compare favorably with those of the most advanced States and which gives such evidences of conscientious and intelligent work. The reports of the biologist, chemist and water inspectors are also included in this volume, and also the transactions of the Maryland Public Health Association. The graphic charts add greatly to the usefulness of this report.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending March 11, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	..	..
La Grippe.....	..	6
Pneumonia.....	..	34
Phthisis Pulmonalis.....	1	26
Measles.....	6	..
Whooping Cough.....	..	..
Pseudo-Membranous Croup and Diphtheria. }	21	2
Mumps.....	1	..
Scarlet Fever.....	15	..
Varioloid.....	..	..
Varicella.....	1	..
Typhoid Fever.....	4	3

The College of Physicians and Surgeons of Baltimore contemplates adding a new building on its Saratoga street side.

The building for the Cornell Medical School will be erected soon at a cost of \$300,000, which has been given by Col. O. H. Payne.

Mr. J. B. Noel Wyatt, the well-known Baltimore architect, has been made a member of the State Board of Health to succeed the late Mr. Frederick H. Smith.

Dr. C. E. Chamberlayne, a prominent physician of Middleburg, Va., died at his home last week, aged fifty-two years. Dr. Chamberlayne received his degree from the University of Maryland in 1875.

The State Board of Health has passed an order prohibiting farmers, canners and fish packers from taking into their employ any person who does not show proof of a successful vaccination of more recent date than July last.

The French Medical Press Association held its forty-third meeting on February 3 under the presidency of Dr. Gézilly. It was decided to organize an international congress of the medical press, to be held in Paris in 1900, at the same time as the other congresses which are to take place there in that year.

The abundance of money at this time has opened generous hearts and wealthy pockets. Mr. H. C. Fahnestock has given the New York Post-Graduate Hospital Training School for Nurses a gift of \$100,000, and eight women

have given \$5000 each to begin a fund of \$400,000 for a new building in connection with the Woman's Hospital of New York.

After so many years of didactic teaching the University of Virginia has decided to add a hospital to its medical department, and an appropriation of \$20,000 has been made to inaugurate this movement. The school will also have a course lasting four years from now on and will once more take its old rank as one of the leading medical schools of this country.

All the medical schools are preparing for their commencements. The graduating classes are not very large, and owing to the distribution of the students among the various schools of the city little money is made by any one school. It was this fact, together with a laudable desire to improve facilities, that suggested a consolidation of two or more of the largest schools.

Dr. Edmund Souchon, president, and Dr. Quitman Kohnke, secretary, of the Louisiana State Board of Health, have been indicted by a physician of one of the parishes, who charges these State officers with allowing yellow fever to enter without any notification of it, these officers being of the opinion that yellow fever was not as infectious as other diseases, such as typhoid fever.

The death of Dr. Delano Ames of Baltimore was a great shock to many who knew him, as he had been seen so lately attending to his duties, and while he did not look especially vigorous his death was hardly expected so soon. Dr. Ames was a graduate of the Johns Hopkins University in 1891 and of the University of Maryland Medical School a few years later. Dr. Ames was a skilled pathologist and a keen diagnostician. He had given much attention to tuberculosis.

The withdrawal of Dr. Simon Flexner from the Johns Hopkins University will be a great loss to that institution and naturally a great gain to the University of Pennsylvania, which gets him. He is to succeed Dr. Guitéras as professor of pathology in that university. Dr. Flexner is a native of Louisville, and came to the Johns Hopkins University as a graduate student in 1890. The following year he was made fellow in pathology, and in 1892 he succeeded Dr. Councilman in the chair of pathology.

Washington Notes.

There are quite a few cases of cerebro-spinal meningitis in the southwest section of the city, and some fear is expressed that the disease may become epidemic.

Acting Assistant Surgeon J. J. Curry has been relieved from duty at the general hospital, Fort Myer, Va., and ordered to duty at the general hospital at Savannah, Ga.

There is a decrease in the roll of smallpox patients at the hospital. The number now under treatment and rapidly recovering is twenty-five. The disease is gradually dying out.

Dr. Walter Beatty has returned from Cuba, where he has been with the immunes for several months. He will enter into the practice of medicine in the southeast section of the city.

At the Therapeutical Society Saturday evening Dr. Dufour read a paper on "Oto-Massage for Chronic Catarrhal Otitis." Dr. Kolipinski presented a case of torn scalp.

At the society Wednesday evening Dr. Roy presented an essay entitled "The Bronchitis and Pleuritis of Uric Acid." Dr. Lamb presented specimens illustrating diseases of the kidneys, and Dr. Glazebrook also presented specimens.

Dr. Wesley Thompson of this city, while in New York waiting to sail for Manila for duty in the Philippines, was stricken with la grippe and died. He was twenty-five years old, a graduate of Harvard University.

The following report comes from the adjutant-general's office: Between May 1, 1898, and February 28, 1899, the number of men killed in battle was 329; number dying of wounds, 125; number dying of disease, 5277—total, 5731. Thus during the recent unpleasantness about 93 per cent. of the deaths in the army were due to disease.

The following surgeons have been ordered to Manila for duty in the Philippines: Acting Assistant Surgeon George W. Roberts, U. S. A.; Assistant Surgeon Capt. Charles Lynch, U. S. A.; Acting Assistant Surgeon Walter H. Dade, U. S. A., now at Chicago; Acting Assistant Surgeons Shannon Richmond at Greenville, S. C.; H. E. Menage at Fort Sam Houston, Texas, and John T. Helsell at Fort Sam Houston; Assistant Surgeon Capt. Wm. F. Lewis of the Eighth Cavalry at Baltimore; Majors Henry St. Harris, William P. Kendall and Henry I. Raymond of the U. S. V.

Book Reviews.

THE NATURAL HISTORY OF DIGESTION. By A. Lockhart Gillespie, M.D., F.R.C.P. Ed., F.R.S., etc., Edinburgh. Illustrated by Figures, Diagrams and Charts. London: Walter Scott, Limited. New York: Imported by Charles Scribner's Sons. Pp. 427. Price \$1.50.

This book is one of the Contemporary Science Series. The author has had abundant facilities at command in the preparation of the volume. Its teachings are very lucid and the text is copiously illustrated. The size and general order of arrangement are commendable features. The seventeen chapters, forty-eight figures, twenty-three charts and ninety tables embrace a vast deal of valuable matter; in fact, the book treats every subject within its scope in the light of modern-day science. Any physician can well afford to own such a volume and familiarize himself as far as may be practicable with its demonstrations and deductions.

REPRINTS, ETC., RECEIVED.

The Antitoxine Treatment of Diphtheria. By H. K. Mulford Co.

The Progress of Otology. By M. D. Lederman, M.D. Reprint from the *Laryngoscope*.

Appendicitis. By Joseph Eastman, M.D., LL.D. Reprint from the *Medical and Surgical Monitor*.

A Conclusive Proof of the Efficacy of Vaccination. Reprint from the *Philadelphia Medical Journal*.

Boston University School of Medicine. Twenty-sixth Annual Announcement and Catalogue, 1898-99.

The Treatment of Chronic Naso-Pharyngitis. By Lewis S. Somers, M.D. Reprint from the *Memphis Lancet*.

The *American Medico-Surgical Bulletin*, now published twice a month, will be issued in future monthly.

Positive Proof that the Blood Can Circulate Without the Aid of the Heart. By Matthew Joseph Rodermund, M.D.

The Effect of Hypertrophy of the Inferior Turbinal on the Nasal Septum. By Lewis S. Somers, M.D. Reprint from the *University Medical Magazine*.

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THE TREATMENT OF CROUP- OUS PNEUMONIA WITH HOT-WATER BAGS.

By Louis Kolipinski, M.D.,
Washington, D. C.

I CLAIM no originality in the use of hot-water bags in the treatment of croupous pneumonia. This contrivance, which is as common in an American household as a syringe or a spray atomizer, is but an improvement on the primitive hot poultice. My only claim is that when used systematically the results are very good, that in fact it is often possible to abort the disease.

The concurrent treatment by physical means, the application of cold, either as ice to the chest or a general cold bath, which is well established in Europe and growing in favor in this country, is a rival to the method of the local application of heat. It is one, however, that possesses objectionable features in private practice which are often sufficient to cover the treatment with disfavor when successful, and with severe condemnation when a fatal issue results. To overcome a prejudice or dislike is often so tedious and annoying that frequently it is by far the better policy to select agents less repugnant to the feelings of the sick or their families whenever we can honestly do so without becoming guilty of neglect of the end in view.

The early recognition of croupous pneumonia is of prime importance in the treatment. In most cases this is not difficult. In some the disease is first detected after the lapse of two or three days, which may be a lamentable loss of time. In other instances the disease may be entirely overlooked, as in children when it

simulates meningitis, in drunkards when croupous pneumonia is complicated with catarrhal jaundice, or when it occurs in the course of other acute or chronic diseases.

The chief clinical varieties of croupous pneumonia are (1) the abortive, (2) the typical, (3) the typhoid or asthenic, (4) the migratory, (5) the central, (6) pleuropneumonia, (7) with delayed resolution, (8) ending in lung abscess or gangrene.

Central pneumonia, in which the physical signs are absent or tardy in appearing, is a clinical form of particular interest. A diagnosis must be made by combining the other objective and subjective symptoms, and those which ordinarily are of chief value can possibly be but of use as a means of confirmation later on in the course of the attack.

The symptoms which lead to early recognition are the fever, with or without the initial chill, the bloody sputum, the crepitant rale and patch of solidification. The other symptoms which are encountered, and which in individual cases are often conspicuous or made prominent by the complaints of the sick, must also be considered, as often leading when recognized and weighed to a ready understanding of the actual malady. These are:

1. Sensation of being stricken with a serious malady.
2. Apathy and denial of illness.
3. Nausea and vomiting.
4. Acute pleural pain, epigastric or lateral thoracic.
5. Dyspnea and cyanosis.
6. Headache.
7. Harassing cough in the beginning, characteristic short hack in the stage of solidification.
8. Delirium or somnolence.
9. Herpes facialis.

10. Insomnia.

11. Icterus.

Of these the acute pain of an accompanying pleurisy (variety pleuro-pneumonia) should be separated from the symptoms of croupous pneumonia, for whilst, in fact, often present, its existence so alters the treatment both in the onset and from possible terminations that a clearer conception of the disease under discussion is obtained by its elimination. Icterus clinically may be ranked as a symptom, whilst pathologically correct it is a complication like pleuritis, meningitis, nephritis or pericarditis.

As soon, then, as croupous pneumonia is diagnosed, the treatment is as follows: A pair of hot-water bags are selected, the largest size found in the shops, preferably of the capacity of a gallon. These are filled with boiling water, well secured from leakage, and each one wrapped in a small shawl of compact texture, or in a portion of blanket cut for the purpose. They are then placed side by side on the bed so that the mouths of the bags point upwards; over them is placed a third shawl, folded several times, or a further piece of blanket; above them two or possibly three pillows are arranged for the patient's head. The bags thus form a sort of shallow cradle for the post-scapular regions. To make the plan clear to the attendant he is told that the bags must be placed like a knapsack on the back of a soldier and a little higher up as well. The bags are refilled every three or four hours. The exterior temperature, found by placing a common atmospheric thermometer between the coverings of the bags and the patient, varies from 95° to 130° F. A mean temperature of 110° F. should be aimed at, as an elevation of 120° F. or more is liable to inflict severe burns on the skin, particularly so if the patient's cutaneous sensibility is for the time obtunded. These burns, which I have frequently met with, due to the overzeal or excitability of the attendants, have no untoward effect in the course of the lung fever, but very probably the opposite, and a pneumonia may disappear in a day or two when this accident has happened, although the injury itself may remain for two or three weeks.

The bag treatment is **continued** without intermission until the body temperature returns to normal and remains so for a day or two.

In croupous pneumonia the diet, for obvious reasons, should be of liquid foods of any description, the ideal ones being milk and cocoa. No remedial treatment is necessary. If by the topical application of heat we can often prevent hepatization, or if by the same means we can clear up that which is solidified, internal medication is superfluous, or, in fact, injurious. The symptoms and their palliation which in practice are apt to tempt one to the use of some drug are the insomnia and the cough. For the insomnia, which disappears with improvement or with the crisis, a hypnotic is needless. The cough, which at times is most violent, needs no suppression, for, in fact, we can assure the patient and his friends that thereby life is assured; that the absence of cough or its suppression is far more dangerous to recovery.

The pain of a beginning pleuro-pneumonia must often be relieved by morphine, but in croupous pneumonia alone I consider opium or morphine inadmissible, be it to relieve the cough, check delirium or to produce sleep. In small or timid children, but not in infants, the treatment described is impractical, it being impossible to restrain their motions or to prevent them from seeking a more comfortable posture. In these cases the older method by flaxseed-meal poultices is the better.

The nursing in croupous pneumonia should be one of constant attention, and for this reason and from natural causes the work of family or friends is equal in efficacy to that of trained nurses. The cases appended had these volunteer services, and in my personal experience it is but exceptional that a trained nurse is needed or is available.

The following, treated during part of the winter of 1898-1899, may serve in illustration of what has been said:

Case I.—C., female, sixty years; had tubercular anemia, croupous pneumonia, with insidious onset, symptoms simulating influenza, with cough loose and bronchial; on fourth or fifth day the pneu-

monia fully developed; much prostration, free bloody expectoration, restless, sleepless and slightly delirious at night; typhoid state during the day; crepitant rales middle of both lungs posteriorly; hot-water bags applied on fifth day; temporary improvement on the sixth; solidification then rapidly advances; no cough; loud tracheal rattle; becomes unconscious and death on the seventh day from extensive lung solidification and pulmonary edema.

Case II.—M., man of twenty-five, of fleshy habit; previous health good; family tubercular on the mother's side; convalescent from epidemic influenza; exposed himself on a cold, wet night; chill, fever and oppression in breathing on retiring; bloody expectoration; evening temperature 102.5° , pulse 96, respiration from 36 to 50; second day evening temperature 103.6° F.; third day evening temperature 102.6° F.; fourth day evening temperature 101.8° F.; fifth day evening temperature 102.6° F.; sixth day evening temperature 102° F.; crepitant rale on the middle left side posteriorly; also impaired respiratory sounds opposite side approaching solidification; treatment begun at once; crisis on seventh day, with subnormal temperature and profuse sweating. The patient at first was afraid of the treatment; later he could not be induced to discontinue it. Five days later he was seized with acute right-sided fibrinous pleurisy; morphine in heavy doses necessary for the pain; recovery in nine days and a very tedious convalescence, due to rupture of a lung adhesion and accompanying symptoms of shock; later thrombi of veins of both lower extremities.

Case III.—H., male, sixty-three; previous debility of chronic lead-poisoning; developed asthenic pneumonia whilst convalescing from acute pleurisy of the right side; bloody sputum, moderate cough, insomnia, fever slight; diplococcus pneumoniae abundant in expectoration; auscultation: moderate dullness near the center of the right lung posteriorly; crepitant rales over corresponding part of the left side; hot-water bags applied; no further cough; pulmonary sounds and percussion note normal in

twenty-four hours; hot-water bags continued three days. This case is peculiar, because of the very slight fever, typical sputum and very marked pulmonary physical signs.

Case IV.—M., a girl of sixteen, of very good family history; suddenly seized with oppression in breathing; cough and tendency to faintness; evening temperature 103° F.; crepitant rales in the middle portion of the right lung posteriorly; hot-water bags applied the next morning; in the afternoon temperature 103.5° F., condition same; gelatinous, stringy sputum; morning of the third day temperature normal; rapid convalescence; extensive posterior bilateral burns (second degree), due to applying the bags without sufficient covering.

Case V.—B., female, sixty-four; for a week complained of feeling badly; no appetite, restless nights, aches and pains in back and in extremities; develops cough and general prostration; morning temperature 102° F. Lateral aspect right lung, near base, crepitant rale shading into absence of respiration; on applying the hot-water bags decided improvement at once, the succeeding night being one of ease and refreshing sleep; second day disease arrested, pulmonary sounds normal, no fever; owing to her age and the insidious onset of the croupous pneumonia, convalescence prolonged, but no further local or general symptoms.

Case VI.—Mrs. S., sixty-two years. February 3, 1899, confined to her bed with la grippe; slight fever; much hacking cough; no appetite; sleep disturbed; aching in the limbs; prostration moderate. February 5 and 6 improving; cough less intense and frequent. February 8 called suddenly by the alarmed family, I not having seen her on the previous day; in the afternoon she had developed much unrest and nervous excitability; had a chill; expectorated blood; evening temperature 103° F.; at posterior inferior portion of the right lung, crepitant rales; hot-water bags every four hours; the next afternoon temperature normal; moderate cough remains, for which a codliver-oil emulsion; convalescence smooth, but strength returns somewhat slowly.

Case VII.—S., daughter of preceding, age twenty-four; well developed; had a bronchial cough for a week; was her mother's nurse and occupied the same bed at night; February 12, at night, a chill; February 13, afternoon, first saw her, temperature 103.5° F.; much cough; rusty sputum; crepitant rales inferior portions both lungs posteriorly; complains of severe pain in lumbo-sacral region; is nursed by a girl friend; hot-water bags. February 14, in afternoon, found the patient lying on her left side, a single hot-water bag at the interscapular region, a second one at her feet; slept little during the night; moderate cough; rusty sputum continues; manner composed; some sweating; pulse febrile; temperature 104.5° F.; no crepitation and no evidence of lung solidification; hot-water bags reapplied in proper manner and treatment to be pushed with energy. February 15, afternoon, no local signs; the preceding night one of acute insomnia; moderate cough; temperature 103° F.; an egg-nog, if desired, for the sleeplessness. February 16 temperature normal; patient is well; treatment continued for a day; very rapid convalescence.

Case VIII.—H., seventy-six years; decrepit with age, but mental vigor well preserved; croupous pneumonia, with insidious onset; cough at night; loss of appetite; aching in limbs; irritable bladder; rusty and bloody sputum; temperature 101° F.; crepitation roots of both lungs—this was evident on the fourth day; hot-water bags continued four days; no further symptoms after third day of their use; convalescence uncomplicated.

Case IX.—McG., female, sixty years; tubercular tendency during an attack of influenza; began to cough, with an abundant expectoration of blood; temperature 101° F.; no chill; slight crepitation roots of both lungs; hot-water bags; no further symptoms after second day and convalescence short.

Case X.—P., middle-aged man; old dilatation of heart, with irregular pulse; fully-developed picture of chronic alcoholism; slight picture of chronic alcoholic mania, with pronounced alcoholic ataxia; seized suddenly with oppression in breathing; temperature 102° F.; rest-

less and apprehensive, with presentment of speedy death; bloody sputum, also typically rusty; extensive crepitation base of left lung posteriorly; hot-water bags; next day no crepitus; much sweating; feels relieved in breathing; had a fair night, but still apprehensive, and realizes that he has felt very sick; disease arrested; bags continued two days longer; recovery very speedy. Before the onset of the lung fever this patient, who had given up whiskey a few weeks before, consumed daily from eighteen to twenty-four bottles of ale. Notwithstanding the grave general condition in this case, all alcoholics were at once withdrawn in beginning the treatment proper, and that with no untoward effect.

These ten cases show one death and nine complete recoveries. In the fatal case the treatment was begun with the disease fully developed and extending. Case II ran a normal course. Cases III, IV, V, VI, VII, VIII, IX and X were aborted. One patient was sixty years of age; five each over sixty; one was seventy-six. Five were unfavorable subjects. The seventh, Miss S., was an instance in which contagion was evident. Her initial chill was on February 12. That of her mother, from whom she contracted the disease, occurred on the eighth of the month.

PURIFIED VACCINE VIRUS.

By W. F. Elgin, M.D.,

Glenolden, Pa.

THE present unusual and widespread prevalence of smallpox would be an excuse, were an apology needed, for calling the attention of the profession to the question of vaccination. Physicians, as a rule, are conservative, and justly so, in their attitude toward new remedies, or old remedies in a new form, since it is a deplorable fact that the vast majority are in reality of little or no value, although recommended by eminent authorities. It is my purpose in this paper to present to the thinking though conservative mind such an array of facts and authorities in reference to the now all-important question of vaccination, as to compel at least a personal investigation of the claims ad-

vanced on behalf of improved vaccine virus.

Until very recently a sore arm after vaccination was considered sufficient evidence of protection invariably to warrant the issuing of the certificate. Bacteriologists tell us that "sores" may result from inoculation of various kinds of bacteria which are prevalent in vaccine lymph, blood serum being one of the best media known. In fact these organisms may **and do** produce tissue necrosis when the specific element of vaccinia is absent, or when the latter is present and aggravates the normal or pathological condition of vaccinia. Now if we admit this, and no well-read physician will deny it, we are instantly confronted by a degree of solicitude lest we issue to confiding patients certificates declaring them immune from a loathsome disease and thus lull them into a false security, infinitely more dangerous to the public health than entire absence of vaccination.

This may seem an extreme position to take, but with an experience covering hundreds of thousands of points as previously prepared and from which 75 per cent. of successful vaccinations was considered good showing, while frequently the results were much less than this, I find no other position tenable. With virus properly prepared with glycerine, as shown by the report of the New York Board of Health, 98 to 100 per cent. of successful vaccinations is the rule. My own recent experience confirms this statement and this should be conclusive on the question of reliability.

As to contamination I will present the conclusions of eminent authorities, all the results of original investigations.

Probably Crookshank has made more extensive researches in this line than any other man. He finds in all virus a number of micro-organisms and sums up his report as follows:

"Most of the organisms present are well-known saprophytic bacteria, while others are identical with the group of pyogenic bacteria. Vaccine lymph is a most favorable cultivating medium for micro-organisms, and bacteria invariably gain access to the vaccine vesicle."

Cohn, Sanderson and Godlers have

made similar observations. Voigt of Hamburg, whose experience covers thirteen years' supervision of the production of vaccine virus and constant personal investigations, fully agrees with Crookshank. Pfeiffer asserts after extensive investigations that the virus of the market nearly always contains micrococcus pyogenes albus, and frequently also aureus and cereus albus. The latter in pure culture inoculated upon the skin of calves rapidly produces a local irritation followed by vesiculation, but without the essential characteristics of the vaccine vesicle. The sore arm runs its course and heals in from three to five days and offers an explanation of the so-called false vaccinations. Pfeiffer emphasizes the importance of avoiding inoculating a child with erysipelas by first inoculating the ear of a rabbit with the vaccine to be employed. If erysipelas does not follow in the rabbit within two days it will not in the child.

In 1895 Landmann found that in Germany no less than 80 per cent. of certain children vaccinated successfully, presented an inflammatory condition of the arm, sometimes of an erysipelatous or hemorrhagic character. In searching for the cause of this he examined lymph from thirteen German vaccine plants. He found that the germs in these specimens varied from 50 to 2,500,000 per cubic centimeter, and among those isolated were the various streptococci. Similar conclusions were reached by Copeman, Kline, Menard and others.

The reports of Kline, Copeman, Kent, Chambon, Menard, Straus and others in Europe, and Sternberg, Reed, Kinyoun, Huddleston, Weaver and others in this country, all eminent bacteriologists, confirm the above statements. More than that, with one or two exceptions, and these producers of vaccine material, I know of no one who claims that the old forms of vaccine crusts, quills, points, etc., are sterile. Syphilis, tuberculosis, erysipelas, etc., as Copeman well states, have been charged to vaccination with impure lymph. Dr. Joseph Jones claims that during our Civil War vaccination with dried lymph or crusts resulted in hospital gangrene, tetanus, septicemia,

pyemia, etc. Even leprosy has been carried in this way. Dr. Hildebrandt notes that simultaneously with indiscriminate arm-to-arm vaccination on the Hawaiian Islands leprosy revived and was spread over the whole territory. Webster Fox reports three cases of lupus having their origin in vaccination scars. One case was in an infant and dated from the healing of the vaccination wound. Toussaint vaccinated a tuberculous calf with lymph from the arm of a healthy infant. When the vesicle was mature, he inoculated with the lymph four rabbits, a pig, a cat and a pigeon. Two rabbits killed two months later displayed local glandular and pulmonary tuberculosis; the third, killed after 218 days, and the fourth, after 246 days, were also tuberculous.

These facts emphasize two things, namely, the dangers lurking in vaccine material as formerly exhibited, and the importance of demanding improved methods in preparing virus.

In 1891 and again two years later, Copeman called attention to the value of glycerine in preserving vaccine lymph as then employed by Chambon and Menard, and claimed priority in calling attention to the fact that not only was it a preservative of vaccine, but a purifier as well, since it destroys all extraneous bacteria present in the lymph. He pointed out that whereas all lymph when collected and mixed with glycerine contains numerous organisms, lymph so mixed and allowed to stand in a suitable place from four days to one month is sterile so far as inoculations in the usual culture media will show. This claim for glycerine has been investigated by numerous commissions, all of which have practically sustained it. The result is that Paris, Berlin, Dresden, Cologne, Geneva and Brussels have special stables and laboratories for preparing vaccine lymph mixed with glycerine, controlled or patronized by the governments of these cities.

Upon the special report of Richard, Thorne and Copeman, commissioners appointed by the London Local Government Board, a similar laboratory was recently established by that city. Several propagators in the United States have

since also adopted this form of virus. The Medical Department of the United States Army, also the United States Marine Hospital, recommend it, and the New York Board of Health has been preparing the product exclusively for a few years.

The most progressive health boards of the various States have adopted glycerinized vaccine lymph, and so far as I know not one had withdrawn their approval. The new product is so easily employed and is not followed by the suffering, the uncertainty and the actual risk of infection by organisms (which the virus may carry) that always attends employment of the older forms.

In proof of the fact that glycerine does destroy pathogenic organisms I quote from Copeman as follows:

"In 1896 a commission, under the presidency of Dr. Schmidtman and including Drs. Koch, Pfeiffer and Frosch, also directors of vaccine laboratories of Berlin, Cologne and Stettin, was appointed by the German Government. To test the efficiency of glycerine as pathogenic organisms they mixed numerous streptococci and diphtheria bacilli with vaccine lymph in glycerine. The result was that the streptococci were killed in eleven days and the diphtheria bacilli in twenty days."

It is not claiming too much, therefore, to state that with the employment of none but lymph preserved and purified in glycerine we obtain a vaccine vesicle uncomplicated by excessive inflammation and necrosis and affording protection with the minimum of inconvenience and suffering to the patient.

SUPRARENAL EXTRACT IN ADDISON'S DISEASE.—Destot (British Medical Journal) relates a case of Addison's disease which was treated with suprarenal extract. Injections of the liquid extract were given with gradually increasing doses. The pigmentation diminished in a remarkable manner. The unfavorable condition of the stomach and bowels, however, made it impossible to continue the treatment. The case ended fatally.

Society Reports.**THE CLINICAL SOCIETY OF
MARYLAND.**

MEETING HELD FRIDAY, MARCH 17, 1899.

THE meeting was called to order by the president, Dr. Lord.

Drs L. M. Allen, Harry G. Beck and A. Cotton were elected to membership.

Drs. Stewart Paton and Robert Reuling gave a "Demonstration of Serial Sections of the Brain."

Dr. J. Whitridge Williams reported a "Case of Successful Cesarean Section." The patient, aged 22, had never been pregnant before, had complained for several years of pain in the back and lower abdomen, and of menstrual irregularity; she was a well-nourished woman with a normal pelvis, about eight months pregnant. Upon examination Dr. Williams found that the pelvic cavity was markedly pushed upon by the tumor, which extended almost entirely over the posterior part, then extended directly across the pelvis, following out the curve of the sacrum and reaching down to its lower margin; in other words, producing very marked relative contraction of the pelvis. He said he attempted to push the tumor up into the abdominal cavity, but was absolutely unable to budge it, and therefore concluded that some means must be adopted for its removal, a number of possibilities suggesting themselves as to the best means of treatment. In the first place, had the woman been seen at an earlier period—some months before—an operation could have been performed, removing the tumor and allowing the pregnancy to go on, but in this case the woman was seen by him only about six weeks before labor, so that the question arose as to what was the best method of treatment. He said it seemed hardly fair to remove the tumor and allow the patient to go into labor with an abdominal wall which was weak; another alternative was to induce labor, which at that time would be very fatal; another was to let the woman go on to the end of the term, then puncture the tumor, which he believed to be a cyst; so that he concluded that the most conservative thing

to do was to perform a Cesarean section just about the end of the term, take the child out of the uterus and remove the tumor and child at the same time.

When the patient fell into labor she was examined by Dr. Dobbin, who found the cervix dilated to about four to five c.m. in diameter and the membranes ruptured. She was placed in the horizontal position, and Dr. Williams then made an incision in the median line of the abdomen about twenty centimeters long, extending an equal distance above and below the umbilicus. The woman was quite fat and there was some hemorrhage from the wound, which was, of course, readily controlled by clamps. After making an incision in the anterior wall of the uterus about 15 centimeters long, he passed his hand in, seized the child by the leg and extracted it. The entire time from the beginning of the operation until the child was born was something less than three minutes. After the child was extracted, he extracted the placenta, and then began to close the uterine incision. After removing the placenta, Dr. Dobbin grasped the lower part of the uterus and compressed the vessels to avoid any hemorrhage. After sewing up the uterus, he passed his hand down back of the uterus and brought out a cystic tumor filled with fluid. The abdominal wound was covered with sterile towels and the woman changed from the horizontal to the Trendelenburg position. The tumor was removed in such a way as to leave the ovary and part of the tube on that side, the left tube and ovary being normal, and the stump of her right tube. The abdominal wall was then closed with catgut suture, and the skin wound closed with continuous silk and catgut suture.

The patient made a most excellent recovery and left the hospital thirty-three days after operation. The highest temperature was 101°, which was reached only twice, and was due to a condition of the patient's breasts. The child was perfectly healthy and weighed a little less than seven pounds.

Dr. Williams said that in the treatment of the obstruction of labor by ovarian cysts about eight methods of treatment have been pursued, the most popular

method being to puncture the tumor and empty its contents into the vagina and then extract the child; two other methods are to attempt version and apply forceps; then in a number of cases craniotomy is performed, and a dead child extracted; another is the Cesarean section. He says that if we puncture these tumors through the vagina, we will, in about 50 per cent. of the cases, let the contents into the peritoneal cavity. Laparotomy has been done in a great many instances, but not very satisfactorily, and to subject the woman first to laparotomy, which is not a light matter, and then subject her to labor, he thinks is rather a brutal method of procedure. The method of removing the tumor by the vagina can be adopted in a certain number of cases, but the walls of the uterus are well supplied with blood and one runs a great danger of hemorrhage. He, therefore, thinks most of these methods are contraindicated, or certainly not to be earnestly advocated; and if the tumor is any size and likely to require a serious operation, if the woman be in good shape and in a locality where competent aid can be called in, he believes the Cesarean section is the most conservative way of delivering the woman and removing the tumor, and from his reading and experience he thinks the operation par excellence in these cases is Cesarean section.

Dr. B. B. Browne said he had never had any experience with ovarian tumors in pregnant women, but he believed the plan *Dr. Williams* had laid out was the proper one to be pursued in all of these cases.

Dr. A. D. McConachie read a paper entitled "Cerebellar Abscess of Otitic Origin," in which he referred to a case with the following history: The patient was a boy 12 years old, whose right ear had been discharging three years, following convalescence from typhoid fever; previous to that the boy was robust, always well and cheerful; since then he has been irritable, peevish and illy nourished. The usual measures for the arrest of the otorrhea were employed, with frequent cessation of discharge, to recur at intervals. About a year ago he had a marked recurrence of the otorrhea with certain cer-

ebral manifestations, as vomiting, nausea and vertigo, followed by a cessation of the discharge, with coma, and as a consequence death was looked for. On chiseling into the mastoid it was found dense, the antrum being reached at half an inch depth and a small amount of cholesteatomatous material removed, the post-superior wall of the meatus was partially knocked down and a curette passed into the tympanic cavity. Free communication was established between the external meatus and antrum, manifested by syringing through the antrum into the tympanic cavity and out at the external meatus and vice versa. On the tenth day after operation *Dr. McConachie* found the boy semi-conscious, with marked retraction of the head, pupils dilated, eye ground normal, temperature normal, pulse 60, restless and apathetic. He advised further operative intervention, as he suspected either a cerebellar abscess or an extra-dural abscess, but was prevented from reaching the patient in time, and on the eleventh day after operation the boy died. At autopsy the meninges and sinuses were found normal except a small area of meninges at the outer border of the right cerebellar lobe, where the meninges were necrotic, and about two ounces of pus escaped from a large pus cavity in the right lobe on removal of the brain from its cavity. The necrotic process had made an opening two millimeters in diameter through the tympanic wall anterior to and above the lateral sinus.

Dr. McConachie said the case was interesting in many particulars as not only indicating the possible menace to life which a neglected otorrhea entails, but also the symptomatic variability in cerebellar complications of the same. A cerebellar abscess usually terminates in death when operative procedures are not used. The abscess contents escape and a new inflammatory action is set up. Abscesses have become encapsulated and remained quiescent for years without giving rise to serious trouble, but such cases are rare. The duty of the physician is to operate early if a successful result is to be hoped for, and the time to operate is when the differential diagnosis is made—a deep problem and sometimes very speculative.

In referring to the treatment of these cases, Dr. McConachie said that the complete removal of these obstructive conditions to respiration and proper ventilation of the tympanic cavity is often all the treatment that is necessary if the case is seen early, before any necrotic process has taken place in the tympanic or neighboring structure. When indicated, the mastoid operation should be done and done promptly, but other and more conservative measures should first be given a fair trial. There is a time, of course, in these cases when delay is dangerous and hesitancy may cost the life of the patient, and for these the radical surgical procedure is necessitated. These surgical measures may begin with the removal of adenoids or other obstruction to free respiration or tympanic damage; it may mean the incision of a drum at the right time for removal of purulent contents; it may mean the removal of carious or necrotic ossicles or tissue therein; it may mean the thorough intra-tympanic washing by antiseptics, or it may mean the opening of mastoid antrum and cells and the removal of other tissues, made necessary by involvement in the diseased process.

Dr. Reik said the case of Dr. McConachie's was an exceedingly interesting and a very important one, in that it illustrates so thoroughly the necessity for treatment in all cases of suppurative otitis media, and probably no surgeon in any branch of medicine would take the chances that the otologist takes with this class of patients. He says there has long been a popular impression that a long-continued discharge from the ear should not be stopped for fear of an eruption elsewhere on the body. It is needless to say that this is a surgical fallacy. Within very recent years the otologists have begun to apply surgical common sense to the treatment of these cases, and we cannot feel that a patient is safe until such discharge has been absolutely cured.

He wished to strongly emphasize the points Dr. McConachie had made with regard to the treatment—that it is wise first to try the simpler measures, such as local treatment by douching, etc., but if this is not successful surgical measures

should be adopted. So long as there is a continuous discharge from the ear there is always danger of a cerebral abscess, and to wait until such symptoms develop renders the chances of recovery by operative procedure very much less favorable. The time to operate is before the abscess has started, or before general infection has taken place; in other words, to operate for the cure of the local suppurative trouble.

Dr. Reuling said the case referred to by Dr. McConachie did not seem to present any typical symptoms of brain abscess; but he believed that where the diagnosis is certain to any extent, the opening of the brain is very advisable.

CENTENNIAL MEETING, MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

McCOY HALL, JOHNS HOPKINS UNIVERSITY,
APRIL 25-28, 1899.

TUESDAY, APRIL 25.

- 8 P. M.—Address by Prof. S. C. Chew, President of the Faculty.
- 9.30 P. M.—Reception by the Faculty.

WEDNESDAY, APRIL 26.

- 10 A. M. to 1 P. M.—Demonstrations and Clinics at the College of Physicians and Surgeons, Baltimore University and the Johns Hopkins Hospital.
- 1.30 P. M.—Luncheon at the Johns Hopkins University, provided by these Institutions.
- 3 P. M.—Scientific Meeting, McCoy Hall. Papers by:
 - Dr. Herman Knapp of New York, on Some Landmarks in the History of Ophthalmology.
 - Dr. E. G. Janeway of New York, Clinical Observations on Some Forms of Heart Disease.
 - Dr. George Ben Johnston of Richmond, How Far Myomectomy Is to Supplant Hysterectomy.
 - Dr. W. W. Johnston of Washington, J. Hughes Bennett; His Services to Medicine.

Dr. Samuel Alexander of New York, The Management of Vesical Calculus in Prostatics.

8 P. M.—McCoy Hall. Annual Oration by Prof. W. W. Keen of Philadelphia, on The Debt of the Public to the Profession.

9.30 P. M.—Private Receptions.

THURSDAY, APRIL 27.

10 A. M. to 1 P. M.—Demonstrations and Clinics at the University of Maryland, Baltimore Medical College, Woman's Medical College and the Maryland Medical College of Baltimore.

1.30 P. M.—Luncheon at the Johns Hopkins University, provided by these Institutions.

3 P. M.—Scientific Meeting, McCoy Hall. Papers by:

Dr. A. Jacobi, European Medicine About 1799.

Dr. E. H. Bradford of Boston, A Study of the Human Gait.

Dr. H. C. Wood of Philadelphia, Nostalgia; the Profession, the Law.

Dr. Roswell Park of Buffalo, Cancer As a Parasitic Disease.

Dr. J. C. Edgar of New York, Obstetrical Teaching.

7 P. M.—Annual Dinner of the Faculty.

FRIDAY, APRIL 28.

8 P. M.—Business Meeting of the Faculty.

The various Hospitals and other State Institutions in the vicinity of Baltimore will be thrown open for inspection at fixed hours, to be announced on the programme.

In the corridors of McCoy Hall and in the Donovan Room there will be a series of most interesting exhibits:

(a) Portraits of distinguished deceased physicians of Maryland.

(b) Diplomas and relics, etc.

(c) In the Donovan Room a literary and pictorial representation of the chief epochs in medicine.

(d) A collection of relics illustrating the text-books and literature of the year of the founding of the Faculty, 1799.

(e) A collection of the published works of the medical profession of Maryland.

(f) A collection of works illustrating the development of art in medicine.

The large drug houses and publishing firms have signified their intention of making important exhibits of pharmaceutical preparations and the recent published works.

Reduced rates on the railroads and steamboat lines will be arranged by Dr. J. D. Iglehart, Secretary of the Transportation Committee, 1214 Linden avenue.

A full programme will be issued about the middle of April and mailed to every registered physician in the State.

MEDICAL MEETINGS IN THE COUNTIES.

Dr. Charles M. Ellis has arranged a series of meetings in the various counties, preparatory to the Centennial Meeting, with the objects of interesting the physicians in the coming celebration and of organizing a local society in the places where none at present exist. The following are the delegates selected from the State Faculty to meet the profession in the counties:

Allegany, Cumberland, Drs. Tiffany and Osler, March 30.

Anne Arundel, Annapolis, Dr. Ashby, April 4.

Calvert (to be arranged)

Caroline, Denton, Dr. Sellman, April 4.

Carroll, Westminster, Dr. Woods, April 4.

Charles, La Plata, Dr. Finney, April 4.

Dorchester, Cambridge, Dr. Harlan, April 4.

Frederick, Frederick, Dr. Johnson, April 12.

Garrett, Oakland, Drs. Tiffany and Osler, March 30.

Harford, Belair, Dr. Kelly, April 10.

Howard, Ellicott City, Dr. Streett, April 4.

Kent, Chestertown, Dr. Jacobs, April 4.

Montgomery, Rockville, Dr. Welch, April 4.

Prince George, Upper Marlboro, Dr. Lord, April 4.

Queen Anne, Centreville, Dr. Earle, April 4.

St. Mary's, Leonardtown, Dr. Preston, April 4.

Somerset, Princess Anne, Drs. Fulton and Thayer, April 5.

Talbot, Easton, Dr. Cullen, April 4.
 Washington, Hagerstown, Dr. O'Donovan, April 12.
 Wicomico, Salisbury, Dr. Theobald, April 4.
 Worcester, Snow Hill, Drs. Fulton and Thayer, April 4.

Medical Progress.

THE REMOVAL OF ADENOIDS IN INFANCY.—Fortunately post-nasal adenoids when they are present in young infants do not commonly give rise to troublesome symptoms. There are exceptions to this rule, however, and one such is quoted by the Lancet. In this case the child was aged four months. He had suffered at birth from purulent ophthalmia, a fact which may partially explain the urgency of his adenoid disorder. During sleep his breathing was so difficult that Dr. Thomas, who has reported the case, found himself obliged to resort to surgical treatment for its relief. The result was successful. The mode of procedure adopted is interesting as bearing upon the performance of an operation requiring some delicacy of manipulation. As was to be expected, a small, specially-constructed forceps was employed, and a piece of vegetation was detached by a single effort, no more being done on each occasion. The process was repeated at intervals of a week, and after three sittings the naso-pharynx was clear. In order to avoid injuring the vomer—the chief danger to be guarded against—particular care was taken to direct the forceps upward and backward. In most cases of adenoid overgrowth in infancy medical treatment happily suffices to relieve symptoms and postpone the need of operation. Dr. Thomas' experience is suggestive in connection with those rare cases which call for active surgical measures as proving what may be accomplished by patience, tact and gentleness.

* * *

SYPHILIS TREATED BY THE INTRAVENOUS INJECTION OF CYANIDE OF MERCURY.—Dr. Arthur Chopping suggests in the Lancet the treatment of syphilis by the intravenous injection of cyanide of mercury and quotes eighty-five cases.

After washing and thoroughly cleansing the part of the arm where the injection is to be made the veins of the arm near the bend of the elbow are made prominent by a rubber tourniquet and about twenty minims of a 1 per cent. solution of mercury is injected into the distended vein. The injection is made every morning unless there is diarrhea. The following advantages for this method are claimed: 1. As the injection is made daily the patient is under constant observation. 2. The exact quantity of mercury introduced into the system is known. This is not the case when pills or inunctions are used. 3. As the drug is administered by intravenous injection the patient is rapidly brought under its influence (with greater rapidity than when administered by the mouth or skin), a marked advantage in cases where it is necessary to produce the full effect of the drug as speedily as possible, such as iritis, otorrhea, bad ulcerative laryngitis, etc. 4. The rapidity with which serious lesions and visible evidences of the disease clear up. 5. The treatment by intravenous injection is especially useful in cases which have not responded to the ordinary methods of treatment, such as pills, inunctions, etc..

* * *

ICHTHYOL SUPPOSITORIES IN CHRONIC PROSTATITIS.—Freundenburg of Berlin (International Medical Magazine) recommends suppositories of ichthyol, .3 grm. to .75 grm., in cocoa butter, to relieve painful defecation, unpleasant sensations in the perineum, dysuria, etc., and for the diminution in the swelling of the prostate gland itself. The relief usually follows quickly and rarely requires a larger quantity than .6 grm. to each suppository.

* * *

THE LABORDE METHOD OF RESUSCITATION.—Herzog (American Journal of the Medical Sciences), after a series of experiments upon dogs which had been anesthetized to the point at which respiration ceased, shows that the Laborde method of resuscitation by rhythmic traction upon the tongue is of no value except in the early stages of the anesthesia.

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MARYLAND MEDICAL JOURNAL,
 Fidelity Building, Charles and Lexington Streets.
 BALTIMORE, MD.
WASHINGTON OFFICE:
 Washington Loan and Trust Company Building.

BALTIMORE, MARCH 25, 1899.

PRODUCTS made outside of the United States will always find a ready market here, provided, of course, they give good results. Some of our most valuable therapeutic agents come from foreign laboratories. That the United States does generously (?) contribute to the maintenance of numerous foreign "laboratories" is rightly inferred from the statement of Mr. E. N. Dickerson, their authorized agent and attorney. Why a special levy should be laid upon this country is not easy to understand, yet we find compensation in learning that we are contributing to scientific research abroad and also pay the cost of the many miscarriages that occur. We must not, withal, allow ourselves to be misled and to enjoy a credit not entirely due us. This same Mr. Dickerson would make it appear, in his statement before the commission on revision, that all these thousand and one synthetics are the direct result of unselfish effort to discover new remedies, when there is no doubt that ninety-nine out of every hundred, and perhaps more, of these products are either by-products or accidental results obtained in the effort to discover a new process for making some already discovered substance or found while trying to make, synthetically, some one or another of nature's products.

Again, we must not give ourselves too much credit for paying the tribute, willingly or un-

willingly, as you please, because it is not the substance itself that is valuable to medicine, but the clinical facts connected with its use, and it is well to remember in this regard that the reports that are paid for are generally good and the good reports are generally not paid for. Skeptics are always wondering if we do not sacrifice a good deal by discarding the "tried and true" for the untried and unproven. The fact that a new synthetic is popular and has paid a handsome tribute does not convince us that humanity has suffered less or that medicine has accomplished more by its advent. We must not, consequently, be fully assured that our present patent and trade-mark laws have done so much for science and souls as the aforesaid attorney would credit. There is a doubt remaining.

* * *

ATTENTION is called in this issue to the elaborate programme of the State Society and the careful preparations that have been made. It is noted that **The Faculty's Centennial.** men of reputation are gathered from various parts of the country to contribute to the occasion, and at such a time as this the profession of Maryland should use every effort to make the meeting a memorable one. Every physician in the State of whatever society, creed or school should come to a meeting of such historical interest, and physicians from the counties should give especial heed to the personal invitations that will be given them between the present time and the time of the meeting. The physicians of Baltimore especially should take a patriotic pride in the success of this meeting and contribute time, money and interest to its success.

* * *

THE paper by Dr. Elgin in this issue makes a strong plea for glycerinated virus, and will probably find many advocates. Of equal force is a paper recently published by H. M. Alexander of Marietta, Pa., claiming superiority for the dried or point virus. The point virus is certainly much more convenient and handy, and if made under the proper precautions gives great satisfaction; but the fluid vaccine has the advantage of lasting longer. The two methods, both of which are old, will find advocates at this time, and after the smallpox scare is over statistics, if it is possible to compile them honestly, will decide on the merits of this case.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending March 18, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	1	..
La Grippe.....	..	6
Pneumonia.....	..	31
Phthisis Pulmonalis.....	..	15
Measles.....	5	..
Whooping Cough.....	3	..
Pseudo-Membranous Croup and Diphtheria. }	23	5
Mumps.....	..	..
Scarlet Fever.....	13	..
Varioloid.....	..	..
Varicella.....	1	..
Typhoid Fever.....	1	1

Cleveland has a German medical society.

Martin of Berlin is now professor of gynecology at Greifswald.

The French surgeons now wear masks over the nose and mouth while operating.

Dr. Henry P. Quincy, formerly professor of histology at the Harvard Medical School, is dead.

The University College of Medicine at Richmond has also adopted a four years' graded course.

B. Fraenkel has been elected president of the Berlin Laryngological Society on its tenth anniversary.

The Medical Examining Board of Virginia will hold its next examination June 5, 6, 7 and 8 at Richmond.

Dr. John H. Piper, a prominent physician of Wheeling, W. Va., and a member of the State Board of Medical Examiners, is dead.

A special meeting of the Maryland Public Health Association was held yesterday afternoon in memory of its late president, Dr. George H. Rohé.

Dr. John B. Moorman of Roanoke, Va., died last week after a short illness. Dr. Moorman was a graduate of the University of Maryland in 1888.

Dr. Pierre G. Dausch is about to open a sanitarium near his house on Jackson Place in Baltimore. Dr. Dausch is a graduate of the University of Maryland in 1868.

Dr. C. Hampson Jones has been appointed chairman of the committee on contagious diseases of the National Sanitary Association which meets in Atlanta in October.

The next regular meeting of the Frederick County Medical Society will take place on Wednesday, April 12. Dr. Robert W. Johnson of Baltimore will deliver the address.

The next meeting of the Medical Association of Georgia will be held at Macon April 19, 20 and 21. Drs. Senn, Hare, Joseph Price and others will be present and take part.

The annual report of the Garrett Free Hospital for Children shows that excellent work has been done in that institution during the past year. Dr. Walter B. Platt is surgeon in charge.

In Cuba prostitution is licensed and under government control, and frequent medical inspection of the women is required. In the province of Pinar del Rio the inspection is done by the United States army surgeons.

Drs. Simon Flexner, L. F. Barker and two students of the Johns Hopkins Medical School, along with Mr. John W. Garrett, who defrays a part of the expenses of this expedition, have gone to Manila to study the diseases of the country.

The fiftieth annual session of the American Medical Association will be held in Columbus June 6 to 9, 1899. The orations will be: On medicine, Dr. James C. Wilson, Philadelphia; on surgery, Dr. Floyd W. McRae, Atlanta; on State medicine, Dr. David W. Brower, Chicago. Dr. Starling Loving of Columbus is chairman of the committee of arrangements. No one connected with any substandard medical school will be allowed to register as a delegate or member of the association.

The International Congress for the Protection of Infants will be held in Buda-Pesth in September next. The medical section will discuss the following questions: (1) Hygiene of the infant in the family; (2) Assistance for foundlings and for children morally deserted or poor; (3) The care of children suffering from disease or having some bodily defect; (4) Playgrounds and places of recreation; (5) Hygiene in schools; (6) Hygiene of persons under age in various industries or forms of labor; (7) Alcoholism. In addition to the medical there will be legal, pedagogic, charitable and philanthropic sections.

Washington Notes.

Three new cases of smallpox have been discovered, the number of patients at the hospital increasing to seventeen. The disease, however, is on the wane.

Acting Assistant Surgeon John N. Goltra, now at Anniston, Ala., has been assigned to duty at Fort Niagara, N. Y., relieving Major William J. Wateman, brigade surgeon U.S.V., who is transferred to duty at Philadelphia.

During the last week 108 deaths were recorded. One was from typhoid fever, one from diphtheria, two from croup and thirteen from meningitis. There are seventy-five cases of scarlet fever and fifty-five cases of diphtheria in quarantine.

Wednesday evening at the District Medical Society Dr. Mary A. Parsons read an interesting essay entitled "Has Mankind a Rudimentary Sixth Sense in Process of Evolution?" Dr. W. W. Johnston presented case and specimen of carcinoma of the gall-bladder.

A whistle, one inch in diameter and one-quarter inch in thickness, located by the x-ray process in the stomach of a three-year-old child, was successfully removed by surgical operation at the Emergency Hospital Saturday afternoon. The child is recovering rapidly.

Cerebro-spinal meningitis is increasing the mortality of the District. During the first week of this disease there were four deaths reported, during the second week nine and for the third week thirteen deaths were recorded. The disease and its mortality is still increasing.

The following physicians are applicants for membership in the District Association and will be acted upon April 4, 1899: Of the Columbian Medical College—Drs. Thomas Dowling, Wm. N. Fisher, Thomas H. Groover, Carl S. Keyser, Wright Rives and William E. Whitson; of the Georgetown Medical College—Drs. Lewis A. Walker, Levin J. Sothoron and John A. Clark; of the University of Maryland—Dr. Horace B. Coblentz; of the University of Rome (Italy)—Dr. Anthony Crocicchia; of the Medical College of Ohio—Dr. Wallace Neff; of the Woman's Medical College of Pennsylvania—Dr. Laura M. Reville; of the Howard University—Dr. Robert S. Lamb.

Book Reviews.

AN AMERICAN TEXT-BOOK OF GYNECOLOGY. Second edition. J. M. Baldy, M.D., Editor. Philadelphia: W. B. Saunders; Baltimore: Medical and Standard Book Co., 3 W. Saratoga street.

Any text-book that is written by a number of men, and therefore putting forth the ideas of the number rather than the principles of a single authority on the subject, is bound to contain material which is, in a certain sense of the word, heterogeneous. This is the fault, if such a condition exist, of the entire "American Text-book" series, and although written by good men, in fact, the best known in the country, we do not think that such volumes can be of as much value to the student as if the work were the embodiment of the ideas of any one of the various authors.

This volume under discussion is no exception to the rule, and although the individual sections are in every respect good, being written by such men as Baldy, Byford, Cragin, Etheridge, Goodell, Kelly, King, Montgomery, Pryor and Tuttle, yet we think had any one of these men written the entire work it would have been more serviceable in the hands of the student.

The subject is opened by sections on the methods of gynecological examinations and operative technique; this is followed by sections on menstruation, abnormalities and sterility; tuberculosis and diseases of the external organs are then taken up, and neoplasms, benign and malignant, displacements, lacerations, diseases of the ovaries and the urinary system follow in their proper sequence. The final section, that on the after-treatment of the patient following gynecological operations, is an excellent one—a subject often omitted in text-books on this subject.

The illustrations and general appearance of the book are good, although many of the colored plates are not as well reproduced as those published in some of the other volumes of the American text-book series.

REPRINTS, ETC., RECEIVED.

Tuberculosis and Consumption. By H. H. Spiers, M.D., Ravenna, Ohio.

Irrigation with Salt Solution and Other Fluids in Surgical Practice. By Hunter Robb, M.D. Reprint from the *American Journal of Obstetrics*.

MARYLAND MEDICAL JOURNAL

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Whole No. 940

Original Articles.

DR. CHRISTOPHER TODD.

By William J. Todd, M.D.,

Mt. Washington, Md.

READ BEFORE THE BALTIMORE COUNTY MEDICAL
ASSOCIATION.

*Mr. President, and Gentlemen of the
Baltimore County Medical Association:*

While preparing this sketch of the life of Dr. Christopher Todd for another purpose, it occurred to me that as physicians of Baltimore county, and as an association representing the medical profession of that county, we could pay, in part, a debt we owe to the medical men who have gone before, by learning more of their times, their work, their hardships, their pleasures, and recording such information.

Some one has said "Man is a quotation of his ancestors and teachers." This is doubly true of the medical man.

I am sure we in this day of advancement—with stethoscope, microscope, antiseptic surgery, and all the up-to-date appliances—do not realize, I fear the tendency is to discount, their successes.

How many medical students spend seven years in preparation these days before commencing the active medical life? This man was proud that he had taken that number of years to fit himself for his life's work. I most respectfully offer this brief sketch as the first in a line of new work for this association. Others I hope will take up this work of writing sketches of the lives of Baltimore county physicians who have borne the heat of the day and have gone home to their deserved rest.

Dr. Christopher Todd.—The genealogy of this gentleman is found in both Virginia and Maryland records. Capt.

Thomas Todd arrived in Virginia about 1637, married and had a son Thomas of Gloucester, Robert and William. Capt. Thomas Todd brought up the Puritan settlement to Annapolis in 1650, for which Edward Lloyd granted him the land upon which Annapolis stands. He took up lands also at North Point and upon Bush river, reaching back to Worthington Valley. His will of 1665 mentions a brother, Christopher Todd of England, to whom he granted 500 acres upon Corsica creek. Thomas Todd the younger left his Virginia estate and settled at North Point, becoming his father's executor. His will of 1714 refers also to a brother Christopher, whose children, in the absence of male heirs of his son Thomas, were to inherit his home place. Thomas Todd the third married Elinor Dorsey, daughter of Caleb and Elinor (Warfield) Dorsey, and left a son, Thomas Todd, whose will is not on record. The date of the birth of our subject would seem to place him as the heir of Thomas Todd the fourth, or if not, of Christopher Todd above mentioned. We know that Dr. Christopher Todd settled first at "Hampton," the home of Charles Carnan Ridgely, whose wife was a daughter of Caleb Dorsey of Belmont—brother of Mrs. Elinor (Dorsey) Todd. He located there, no doubt, because of the family connections, which is strong evidence that he was closely connected with Thomas Todd the third, whose will of 1738 made his friends Basil and Caleb Dorsey, Jr., executors with his wife Elinor.

"Belmont" and "Hampton" were rival estates of many thousand acres, the latter close to the equally large estate of Thomas Todd, which extended along the Chesapeake from Bush river to North

Point. Another evidence is found in the fact that Dr. Christopher Todd's estate was at North Point Neck, which was handed down always to Thomas Todd, and is still in the possession of Thomas B. Todd, one of the leading truck farmers of Baltimore county.

Dr. Christopher Todd was born in Maryland, February 22, 1763. He, together with Drs. Thomas Cradock, Thomas Love, John Cromwell and Philip Trapnell, represented Baltimore county in the board of incorporators of the Medical and Chirurgical Faculty of the State of Maryland, incorporated January 20, 1799.

Of his early life and education I could not learn anything. He graduated in medicine in Philadelphia. As mentioned above, he spent seven years in preparing himself to practice medicine.

A Dr. Alexander was a classmate of his. This Dr. Alexander was more than likely Dr. Ashton Alexander, born in Virginia, who became pre-eminent in the profession in Maryland, and an active member of the Faculty. He was one of the incorporators of the Faculty representing Baltimore city.

In the transactions of the Medical and Chirurgical Faculty of Maryland, in the report of the Memoir Committee for 1856, I found that Dr. Ashton Alexander completed his medical studies under Dr. Benjamin Rush and lived in his house. He obtained his degree from the University of Pennsylvania May 22, 1795. He was born in 1772 and died in February, 1855, of pneumonia, six years after his classmate.

As Dr. Alexander was a close friend and classmate of Dr. Todd, I assume that the date of his graduation was the same.

Commencing his life's work Dr. Christopher Todd located at "Hampton," the Ridgely homestead. Later he removed to Garrison Forest, Green Spring Valley. He lived there about the year 1824, during the rectorship of Rev. Charles C. Austin. His name appears in the list of vestrymen of St. Thomas' Parish Church. There he raised the larger number of children. Being desirous that they should receive a good education, he had the children of his friends live at his

house, having in fact a boarding school; in this way he was able to pay a qualified teacher and have the children under his immediate care and direction.

Dr. Todd had a family of eight girls and two boys. The youngest, Christopher, died in his ninth year. Thomas was prepared by his father for the medical profession and graduated from the University of Maryland. (I have not been able to confirm this statement from the list of graduates of that school of medicine.) Dr. Thomas Todd died January 13, 1833, in his 24th year, from pneumonia, caused by exposure in rescuing his friends from the Patapsco river, the boat in which they had attempted to cross the river capsizing.

Dr. Christopher Todd married Miss Susanna Sindell, who survived him twenty-eight years, dying in 1877 at the age of ninety-one.

In January, 1899, I visited the graves of both Dr. Christopher Todd and his wife, in Waugh Chapel Cemetery, Greenwood Postoffice, Baltimore county, Md. The dates of their birth and death are taken from their tombstones.

Dr. Todd removed from Green Spring Valley to Baltimore city, living on what is now known as Philpot street, remaining one year. This property is still in the possession of his descendants. From Baltimore city he removed to Taylor's Chapel, a small settlement some five miles from the centre of the city on the Hillen road. At this place he met with an accident, while superintending the felling of a tree, causing his death. He lived but a few days, dying March 30, 1849. He was buried on the Sindell farm at Taylor's Chapel. Later his wife had his body moved to Waugh Chapel Cemetery.

Dr Todd was a surgeon in the War of 1812. His library and papers were destroyed by fire. If he contributed to the literature of his day his contributions have been lost—at least, I have not been able to collect any of his books or papers. He was a large landowner in the Patapsco Neck. In the division of property January 13, 1800, he was allotted "Todd's Neighbor" and part of "Todd's Inheritance," North Point, 343 acres. The

government had erected lighthouses on the property that was originally his. The name of Dr. Christopher Todd appears in the list of active members of the Medical and Chirurgical Faculty of Maryland of 1848.

In a list entitled "List of the Living Members of the Medical and Chirurgical Faculty of Maryland," prepared by Dr. William J. Wroth, dated July 1, 1853, his name appears; this is an error, as Dr. Todd died in 1849.

I am indebted to Mrs. Bealle Burton, the youngest daughter of Dr. Christopher Todd, for much of this information. I am also indebted to Prof. J. D. Warfield, genealogist of Mt. Washington, Md., for his kind assistance.

After finishing writing the above I found an indenture—a partition of land registered in the Land Records of Baltimore, City (W. G. No. 62, 1800.) Thomas Todd dying intestate, this partition of land was agreed to by William, Dr. Christopher, Bernard, George W. and Thomas Todd, proving conclusively that Dr. Christopher Todd was the son of Thomas Todd the fourth.

To William was allotted all of "Tripple Union" and "Todd's Range," to Dr. Christopher all of "Todd's Neighbor" and part of "Todd's Inheritance," to Bernard part of "Todd's Inheritance," to George W. part of "Gassaway's Ridge," to Thomas part of "Gassaway's Ridge."

THE USE AND ABUSE OF ATROPINE IN OCULAR THERAPEUTICS.

By A. D. McConachie, M.D.,

Assistant-Surgeon to the Presbyterian Eye, Ear and Throat Charity Hospital; Ophthalmologist to Bay View Hospital, Baltimore, Md.

READ BEFORE THE MEDICAL AND SURGICAL SOCIETY OF BALTIMORE, MARCH 13, 1899.

THE misuse and senseless employment of atropine in every kind of eye disease is very apparent to anyone having the opportunity of seeing a large number of eye cases in any of our large dispensaries. The extensive employment by ophthalmic surgeons encourages general

practitioners with less experience in eye diseases to instill it almost promiscuously in any and all inflammations without specific indications. It is in many cases not only superfluous, as in simple conjunctival inflammations, but it may also cause the patient much annoyance through disturbing the vision by its use, and bring about positive damage in those whose eyes are disposed to glaucoma, by setting up an attack of acute glaucoma. Its employment should be based upon specific indications, and should be used only so long as is required to obtain the desired results. It is unlike many remedies whose use can do no harm if no good. It is potent for good in suitable cases, but mischievous when applied inappropriately.

The object of this brief paper is to try to give a clear idea when to use and when not to use this remedy. A clear comprehension of this one therapeutic fact will be the means of saving many eyes that might otherwise be destroyed.

Its potency is expended upon the musculature of the iris and ciliary bodies through its effects on nerve endings therein. To thoroughly understand its action, certain physiological and anatomical facts pertaining to these parts must be kept in view. The anterior chamber is bounded in front by the cornea and behind by the iris, and in the region of the pupil by the anterior capsule, and at its margins by the tissue of the ligamentum pectinatum, beneath which lies Schlemm's canal and the anterior border of the ciliary body. The anterior chamber is filled with the aqueous humor which is supposed to be secreted by the ciliary processes, the aqueous passing from the posterior chamber—a space produced by the iris not being in contact with the capsule of the lens by its whole posterior surface, but only by its pupillary margin. Thus an open space is left between the iris and the lens, bounded in front by the iris and to the outer side by the ciliary body, and behind by the lens.

The aqueous passes through the pupil into the anterior chamber to make its escape through Fontana's spaces in the ligamentum pectinatum and into Schlemm's canal and out into the veins

passing from the eye. If for any reason these spaces at the iris angle be blocked, the exit of aqueous is stopped, and as the aqueous is being constantly secreted by the ciliary processes, the tension of the eye increases and vision deteriorates and the condition of glaucoma supervenes. These spaces can be occluded by anything that will dilate the pupil, pushing the iris back into the iritic angle and thus occlude Fontana's spaces.

This is the known physiological action of mydriatics and markedly so of atropine. Occlusion of these spaces in young persons and in those under forty or fifty years does not interfere with the drainage, as the tunics of the eye are not so rigid as after that time, when the tendency to glaucoma becomes marked, the tension is apt to be increased by the use of mydriatics, especially atropine.

Again, when the pupil is contracted by miotics, as eserine, the iris is drawn away from the iritic angle and Fontana's spaces left free and open, and the aqueous can readily pass into Schlemm's canal and on into the veins, and if any tendency towards glaucoma be present the effect of the eserine would be to reduce the tension of the eye.

With these preliminaries kept in view, we can readily understand why atropine should be used at times and why it is contra-indicated at other times.

Uses.—Its greatest indication is in iritis, whether rheumatic, traumatic, syphilitic or idiopathic, the characteristics of which are almost unmistakable—as contracted, sluggish or immobile pupil; discolored iris, adherent to capsule (posterior synechia) of the lens, either partially or totally (seclusio pupillae). These phenomena distinguish it from glaucoma, in which we have a dilated, sluggish pupil, and usually occurs beyond forty years.

In adults a solution of 1 per cent. strength usually suffices to fully dilate the pupil if a drop is instilled every two to three hours. Many times the first instillation gives a regular dilatation. At other times various points of adhesions (posterior synechia) will be noted and stronger solutions (1 to 2 per cent.) must be used, the frequency of instillation and

length of time to be used to be regulated by the needs of the case. In children, one to five years, weaker solutions, say $\frac{1}{4}$ per cent. should be used, owing to their extreme susceptibility to its poisonous effects—as restlessness, rash, like scarlatina, mouth becomes dry.

With many people there is an intolerance of atropine. This is manifested in various ways: (1) Toxic symptoms, as dry throat or nausea. (2) By the production of catarrh (atropine conjunctivitis). These symptoms usually follow the long-continued use of the drug. (3) By redness and swelling of lids, looking like erysipelas. In such cases we must discontinue the use of the atropine and substitute other mydriatics, as hyoscyamine, scopolamine, homatropine.

In all traumatism of the eye, including wounds of the cornea, where we suspect iritic or cyclitic involvement, atropine should be instilled as described. In corneal inflammations (keratitis) it is indicated not so much for its specific influence over the keratitis, as to combat the possible iritis accompanying the keratitis. It also puts the eye at rest by paralyzing the accommodation.

In ulcer of the cornea its use is imperative to avoid and control hernia of the iris and iritic adhesion to the cornea (anterior synechia). Where the ulcer is peripherally situated, it is usually better to use a miotic. It may be used to dilate the pupil so as to explore the interior of the eye ophthalmoscopically, but in adults especially, it is safer to use a milder mydriatic, as cocaine or homatropine. In young adults it can be used with safety, but its long-continued disturbance of vision is objectionable. For refraction work it is being largely discarded by most ophthalmologists, owing to its prolonged effects. Personally, I can accomplish equally good results with homatropine or scopolamine, with less disturbance of vision.

In convergent strabismus, daily continued instillations of atropine will, with suitably adjusted glasses, in hypermetropia, bring about a parallelism of the visual axes and thus obviate a tenotomy. This it does by paralyzing the accommodation and inhibiting convergence.

Atropine is frequently of service in diagnosing an old iritis, active evidence of which is absent, by showing old iritic adhesions—partial or total—to the capsule of the lens. Its continued use in such conditions is, however, not only valueless, but may be deleterious. Atropine in any case should be continued only so long as beneficial results accrue or the desired results are obtained.

In any and all of the above conditions, whilst positive indications exist for its employment, caution and close observation in its use should at all times be borne in mind, especially where increased tension actually exists or a tendency thereto pre-exists, for fear of precipitating an attack of glaucoma and destruction of vision. In cases of acute iritis (small plastic pupil, with pain and redness of the eye) we must use atropine, no matter whether the patient is five or seventy-five years of age.

Abuses.—In simple uncomplicated conjunctivitis it is not only useless, but positively injurious, not only by its possibility of increasing the conjunctival inflammation, but on account of the unnecessary inconvenience produced by its disturbing effects upon vision—paralyzing the accommodation for one to two weeks and producing dazzling, thereby seriously interfering with daily pursuits. Where the conjunctivitis is complicated with corneal ulcer, keratitis or iritis, atropine is indicated. It should never be used simply to dilate the pupil temporarily in patients beyond forty years of age, for reasons already given, the glaucomatous tendency being more marked at this time and its instillation can readily so occlude Fontana's spaces as to precipitate an attack of acute glaucoma. It must not be understood that it should never be used in persons beyond forty years; it can, but should be used only by those whose experience warrants them in judging of its fitness. At this age and beyond a milder mydriatic—as cocaine and homatropin—is safer, and even this should be carefully watched.

The mydriatics, especially atropine, are positively prejudicial in glaucoma—a condition whose pathology is increased tension. The tension is determined by

palpation with finger tips through the closed lids, comparison being made by palpating the other eye, if sound, or one's own eye. Other phenomena of glaucoma beside increased tension may be present, as a widely dilated sluggishly moving pupil. It is axiomatic that increased tension has accompanying it a more or less dilated sluggish pupil. The reverse, a contracted pupil, accompanies abnormally soft eyes. Pain and injection in varying degree may be present. The cornea may be insensitive and hazy, the latter giving rise to colored rings about a gas flame or light of any kind. This condition usually occurs beyond forty years of age. Under no circumstances must we use a mydriatic, as atropine, in such conditions, as destruction of vision will surely follow.

From what has already been said, the indications are such as cause us to think of something to decrease tension by making Fontana's spaces more pervious by withdrawing the iris therefrom. This we can do by the use of miotics—eserin or pilocarpin in $\frac{1}{4}$ per cent. strength. Should the process not cease and the pupil cannot be contracted by the eserine, an iridectomy should be advised and done at once.

This outline of when to and when not to use atropine in eye diseases, if consistently followed, will be the means of saving many eyes that might otherwise be destroyed.

A CASE OF HEMOCHROMATOSIS.

By Eugene L. Opie, M.D.,
Of Baltimore.

REPORT OF REMARKS MADE BEFORE THE JOHNS
HOPKINS MEDICAL SOCIETY, MARCH 20, 1899.

THE patient was apparently in good health until about six weeks before his death, when he was taken with symptoms of typhoid fever, and when seen two weeks later, rose spots were well marked over the abdomen, and there was elevation of temperature and extreme weakness, a most striking feature being the extreme pigmentation of the skin, which was of a brownish color and most marked

about the nipples, genital organs and the backs of the hands, strongly suggesting Addison's disease. The urine at no time showed sugar, the first examination being made about four weeks before death, and, subsequently, on several occasions, the last about three days before death.

The autopsy was performed about nine hours after death, the body being that of a very much emaciated man, with pigmentation extremely well marked. On opening the abdomen there was found pigmentation of the parietal peritoneum; the liver was somewhat cirrhotic and presented a marked brownish pigmented appearance; the pleural cavities showed no evidence of inflammation; the heart was sound and not increased in size, the muscles having a yellowish-brown color; the lungs were normal, except for bronchopneumonic areas; the spleen was enlarged and very soft, with no evidence of any extreme pigmentation. The gastro-intestinal tract showed extreme pigmentation, more marked in the duodenum and stomach than in the ileum and jejunum, but again there was well-marked pigmentation in the large intestine and pancreas, with thickening of the capsule and septum extending into the organ. The adrenals were of normal size and showed nothing particularly abnormal. The kidneys were not markedly pigmented, but somewhat cloudy. The lymph glands throughout the abdomen were enlarged and presented a very brilliant brownish orange-yellow appearance. In the lower part of the ileum there were ulcers with clean bases and confined particularly to Peyer's patches. Cultures made from the heart's blood showed pure typhoid bacillus, which was also present in the liver and gall-bladder, with *lactis aerogenes* in the lungs and kidneys, and colon bacillus in the pancreas.

The case, then, was one of typhoid fever, with pigmentation of the various organs, notably the liver, pancreas, heart and gastro-intestinal tract, associated with cirrhosis of the liver and chronic interstitial pancreatitis. Bands of connective tissue separated the liver lobules one from the other, and there was slight infection of the periphery of the lobules, more marked along the central vein, from

which bands of connective tissue extended between the columns of liver cells. The most striking feature was the abundant deposit of pigment throughout the tissue, particularly in the center. Occasionally the whole cell body is filled with pigment, and in the most extreme cases there is evidence of cell degeneration; the nucleus becomes shrivelled and loses its staining properties, becomes very pale and finally disappears, leaving a clump of granules, still retaining the outline of the cell. This pigment, when treated with ferrocyanide of potassium and hydrochloric acid, gives the Berlin blue reaction, characteristic of iron, and its intensity shows the amount of iron present in the tissue.

In addition, there is a second form of pigment which has a different reaction. It is in the form of small granules of brighter yellow color, and is deposited about the blood vessels and in the smooth muscle cells of the vessel walls, particularly the portal vein, and in the connective-tissue cells in the sheath of the vessels. In this case the blood vessels show the iron-free pigment, which was also present in a section of the pancreas, while in the heart the iron-containing pigment was present in great quantity in the muscle cells. In the gastro-intestinal canal the iron-containing pigment was present in small quantities, but the iron-free pigment in great quantities, particularly in either the smooth muscle cells or in the connective tissue cells. The greatest quantity in the stomach was deposited in the most internal portion of the circular layer; other organs showed a less degree of pigmentation. In the lungs, here and there, was found connective tissue cells which contained the iron-containing pigment. In the lymph glands was found a great quantity of the iron-containing variety, which was present in the form of intracellular globules of varied size, the pigment almost entirely replacing the gland substance, very few of the lymph cells being seen. The case then shows throughout the internal organs a deposit of two forms of pigment within the gland cells, notably in the liver, pancreas and heart muscle cells there is the iron-containing pigment, while in the smooth

muscle cells of the blood vessels and the gastro-intestinal canal, as well as in certain connective tissue cells, there is a deposition of the iron-free pigment.

Dr. Opie said certain writers had ascribed the pigmentation to blood destruction and some cause which, acting on the red corpuscles, sets free the hemoglobin, and from this is formed the iron-containing pigment. A second condition of general pigmentation has been described by the French writers, two cases being diabetes associated with bronzed pigmentation of the skin, and the pigment being of the iron-containing variety. In most of the cases the iron-free variety was not described, but it is very much less conspicuous than the iron-containing pigment, and might readily have been overlooked. Recently there has been described a case of cirrhosis of the liver, with interstitial pancreatitis and general pigmentation of the organs with the two forms of pigment, associated with diabetes with glycosuria. Cases have been reported in which purpura was associated with hemochromatosis, and in a number of cases there has been a local hemorrhagic condition; for example, hemorrhagic pleurisy or pachymeningitis associated with hemochromatosis. It is evidently then associated with the conditions in which there is a destruction of the blood cells, and therefore a possibility of the setting free of the hemoglobin in the blood.

There are a number of cases, however, in which there are no such evident blood-destroying factors, and in the case described by Dr. Opie there was no history of any such condition. In the cases of bronzed diabetes there are two factors present—one, the diabetes with glycosuria, and the other the hypertrophic cirrhosis of the liver. In ordinary cases there is no tendency to the deposition of an iron-containing pigment, and there is no evidence in diabetes that there is a marked blood destruction. He said it would seem that the liver suggests itself as a possible origin of the iron-containing pigment, but if the pigment is formed in the liver, it must be carried to the other organs in the form of emboli, and there was no evidence of such emboli in this

case, nor was there any evidence of phagocytic cells carrying them to other organs. The deposition of pigment in the various organs, the heart and pancreas, for example, takes place by just the same method as it does in the liver, so that it seems more reasonable to suppose that the pigmentation is a condition which takes place in the cell in which the pigment is formed, rather than that it is formed in the liver or other organs and carried to more distant parts.

In connection with the accumulation of pigment in the liver there is often cell degeneration and cell death, and accompanying this cell death there is an increase of connective tissue, and it seems plausible to believe that the cirrhosis and inflammation of the liver and pancreas are a result of the death of the cell following the deposition of pigment.

In all cases of diabetes which have been described there has been found a cirrhosis of the pancreas, and the fact that the cirrhosis is an etiological factor in the production of diabetes has been pointed out by many observers. The diabetes then seems to be a result of the cirrhosis of the pancreas and to be a terminal event in the hemochromatosis; the original factor, then, would be some blood-destroying cause, which in many cases is very obscure. Following this blood destruction there is a formation of iron-containing pigment, which is deposited in various portions of the body; with this deposition of iron pigment there is a cell death, and a consequent interstitial inflammation of certain organs, particularly of the liver and pancreas. When the pancreatitis has reached a certain degree of intensity, it seems possible to believe that there is an onset of diabetes, thus accounting for the diabetic condition in the bronzed diabetes described by some of the French writers. In the case described by Dr. Opie the patient's death was caused by the typhoid fever before the pancreatitis had reached a sufficient intensity to cause death.

CARBOLIC ACID IN TETANUS.—Ascoli records in the *University Medical Magazine* his success in the treatment of tetanus by the hypodermic injection of large doses of carbolic acid.

Society Reports.**THE JOHNS HOPKINS HOSPITAL
MEDICAL SOCIETY.**

MEETING HELD MONDAY, MARCH 20, 1899.

DR. EUGENE L. OPIE presented a "Case of Hemochromatosis" (see page 197).

Dr. Welch said this was the first instance he had seen of this condition, and that it had interested him very much. From what he had read on the subject it seemed impossible to explain the condition as the result of formation of pigment from any hemorrhage, and equally impossible to explain that the pigment is formed in any one organ and transported from that to other parts of the body. He thought *Dr. Opie* had made very clear the objection to either of these two explanations, and also the conception of the condition as a disease by itself, with the changes in the liver and pancreas and elsewhere secondary to the hemochromatosis. This he considers a very important view, and one that seems the most reasonable to him—that we are to recognize as a disease hemochromatosis. It hardly seems easy to understand how mere destruction of the red corpuscles as it occurs in many conditions can be altogether an adequate explanation. We have, of course, in other conditions—pernicious anemia, for instance—an extreme degree of the destruction of red corpuscles. We have there a deposition of iron-containing pigment, though not like that of hemochromatosis, and *Dr. Welch* asked *Dr. Opie* if it was not to be thought that the destruction was certainly along definite lines, and whether the chemistry of the process was not somewhat different from that in ordinary destruction of the blood; otherwise, how could we account for the fact that this is a definite and peculiar disease, and whether this destruction of the red corpuscles, although we could not perhaps define the character of it, was not a peculiar kind of destruction?

Dr. Osler said the condition had interested him very much in connection with the question of cutaneous pigment apart from Addison's disease. He said there

had been a number of interesting cases in connection with hypertrophic cirrhosis. He referred particularly to the case of a young man who had been operated upon on the supposition that he might have a tumor in the liver, and which had proved to be a condition of hypertrophic cirrhosis, the patient having a most extreme degree of pigmentation. There are also cases of enlarged spleen in which there is a considerable degree of staining of the skin, and occasionally we meet in pernicious anemia a degree of pigmentation which is quite suggestive of Addison's disease, so much so that one is in doubt as to the nature of the case. There are certain instances, too, in which one can in no way account for the diffuse pigmentation of the skin; for example, a patient in one of the wards now has a chronic pericarditis, with general pigmentation of the skin, but has not the three cardinal symptoms of Addison's disease.

Dr. Osler says he thinks it a little doubtful, considering the varied conditions under which widespread pigmentation can occur, whether we should accept the view that it is a separate and distinct disease, and when we know that pigmentation occurs so extensively in connection with hypertrophic cirrhosis. He asked if this patient of *Dr. Opie's* had any pigmentation of the mucous membrane.

Dr. Opie, in reply to *Dr. Osler*, said there was no pigmentation of the mucous membrane except that of the stomach.

In answer to *Dr. Welch*, he said there certainly would seem to be some other condition necessary for the production of the cirrhosis and pigmentation in addition to the mere destruction of blood corpuscles. There have been various attempts to reproduce the condition by the injection of substances which cause the breaking down of the red corpuscles, and in such cases there is a formation of iron-containing pigment like that in hemochromatosis, but this is present only in a very moderate degree. The attempts to produce a similar condition have failed.

Dr. Opie referred to the work of a certain writer who had described a series of cases of cirrhosis of the liver, and in about half of them he found a deposition of iron-containing pigment in large quan-

tities in the liver, and in considering the relation of the pigmentation to the cirrhosis, he comes to the conclusion that, with certain varieties of toxemia, there is destruction of the liver cells, which he thinks is the cause of the cirrhosis, and at the same time this poison circulating in the blood, whatever it is, causes a destruction of the blood, and with this combination of blood destruction and injury to the liver cells there is a favorable condition for the deposition of iron-containing pigment. This, of course, is in large part theoretical.

Dr. Thayer then read a paper entitled "Typhoid Fever Associated with Quartan Malaria," written by *Dr. Craig*.

Dr. Craig gave the history of a case of quartan malarial fever associated with true typhoid. By blood examination and accurate temperature charts he was able to trace the simultaneous course of each disease and to show that each pursued its own way without practically influencing the other.

Dr. Osler said this was the first instance he believed in which the quartan infection had been demonstrated in connection with typhoid, so that the history was really completed. He wished to enter a protest against the use of the term typhomalaria in these cases. We do not speak of dysentery-malaria or pneumo-malaria, and we should not speak of typhomalaria. These are cases of combined infection, and as shown by *Dr. Craig's* chart, the malarial infection does not seem to influence very materially the course of the typhoid.

Dr. Thayer said he had been very much interested in the reports which were coming in from the various military hospitals with regard to the frequency of these combined infections. Early in the fall and summer the papers were full of statements that combined malaria and typhoid were very frequent, and the society records in New York stated that 10 or 15 or even 20 per cent. of all the cases were said to be combined, but as the accurate reports come out it is surprising to find how few cases of combined infection have been reported. The conditions that existed in the army camps in Cuba and the South were almost the ideal conditions

for typhoid and malaria to develop together, and one would expect a considerable number of combined infections to occur, but, as a matter of fact, those cases seem to have been relatively few.

Dr. Paton read a paper entitled "Some of the Objections to the Neurone Theory."

Dr. Dobbin reported a "Fatal Case of Puerperal Sepsis with Extensive Pulmonary Thrombosis."

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE.

MEETING HELD TUESDAY, MARCH 14, 1899.

THE meeting was called to order by the vice-president, *Dr. Thos. S. Cullen*. He said that in the commencement of this year's work it was suggested that occasionally we have outside talent at the meetings, and as a result he took pleasure in presenting *Dr. E. P. Davis* of Philadelphia, who spoke on "The Treatment of Labor in Abnormal Pelves."

Dr. Davis referred particularly to the work done in the Jefferson Maternity during the past two years, and said as regards the diagnosis of abnormality of the pelvis, that had been made by pelvimetry, palpation and vaginal examination. The diagnosis of disproportion between the child and the pelvis is evidently of much greater importance than the diagnosis of the absolute size of the pelvis. It is not the number of inches or centimeters in the dimensions of a given pelvis which interests us, but the question as to whether the pelvis is of sufficient size to permit the passage of the child. The diagnosis of disproportion is made largely by palpation, and if necessary by palpation under an anesthetic combined by vaginal examination during the first stage of labor. Especial attention is paid to the question of the engagement of the presenting part. To obtain an accurate idea of the frequency of pelvic abnormality, not simply those in which difficulty occurs in labor must be measured, but that all the cases available must be examined. The results of the examinations made at the Jefferson Maternity showed that out of 466, the total number

examined, 153 abnormal pelves were found.

Dr. Davis called particular attention to the very interesting methods by which nature effects delivery in contracted pelves. In women who move about, and especially in those who work during pregnancy, the contraction of the uterus and abdominal muscles brings the presenting part to the pelvic brim. Partial engagement occurs in many cases of contracted pelves comparatively early in pregnancy. If no obstacle is offered by an impacted bowel, and if the age of the patient be such that the joints of the pelvis are movable and her physical strength be good, the process of accommodation ensues, which brings the child into the pelvis and sets up labor before the usual termination of pregnancy. The child is thus delivered before it becomes too large for the mother, and the mother is spared the dangers of labor in contracted pelvis. This, however, can only happen in young and comparatively healthy women, and especially in those who exert muscular force.

Acting upon this observation, the patient is urged and required to do housework, and directed to do considerable work in a kneeling posture. They are not allowed to lift heavy weights, but active exercise in the semi-prone position is encouraged. The condition of the bowels is very carefully watched, and such patients are frequently and thoroughly purged for two reasons—first, to remove the mechanical obstacle, which impacted feces may furnish, and second, to empty the intestine of the bacillus coli communis, whose presence may complicate an important obstetric operation. At intervals of about two weeks palpation is practiced, and the engagement of the head or its failure to enter the pelvis is noticed. When the head does not enter the pelvis at eight months in these cases, the decision to induce labor or to allow the patient to go on to the end of the term must be considered.

If the disproportion between the head and the pelvis is very considerable, and at thirty or thirty-two weeks of gestation the head failed spontaneously or under pressure to enter the pelvic brim, the in-

duction of labor is declined. If, however, the head dips into the pelvis, and the vertex descends at this period, the patient is again examined in about two weeks, and, if engagement and descent have begun, the induction of labor may be properly considered.

In choosing symphysiotomy as a method of delivery, Dr. Davis said they had selected those cases in which disproportion was evidently not marked, in which the genital canal was well developed and distensible, and in which vigorous labor pains, or possibly a cautious use of forceps, had failed to produce descent. In cases, however, where disproportion was considerable, where the birth canal was small and ill-developed, he had declined symphysiotomy and chosen abdominal section.

In referring to the statistics, he said that in one case symphysiotomy and in six Cesarean section had been performed because of some pelvic abnormality. So far as his experience goes, there is in the result of symphysiotomy, celiohysterectomy and celiohyosterotomy no difference in the success of each operation performed upon uninfected patients in fair condition. Cesarean section may be utilized simply as a method of delivery, and as a last expedient in complicated and infected cases.

Dr. Davis says he is led to conclude that patients having abnormal pelves, who are placed under proper care before the beginning of labor, are favorable subjects for obstetric operation. In cases infected before admission to the hospital, or complicated by a profound constitutional disorder, such as eclampsia or pernicious anemia, obstetric operations do not improve the prognosis for the mother; they do, however, save many of the infants in such cases. Surgically speaking, celiohysterectomy with intrapelvic treatment of the stump fulfills all indications where the patients are not distinctly capable of producing further offspring advantageously.

The treatment of labor in justo-major pelves requires but little interference as a rule. Occasionally version must be performed when an unfavorable position develops.

His own personal experience in Cesarean section and symphysiotomy includes fourteen of the former and eight of the latter. The mortality rate of these operations for the mother was nil in cases where the patient was uninfected and sound before delivery.

Dr. Kelly said it was a pleasure to congratulate *Dr. Davis* on his admirable work, and it was particularly pleasing to note that it falls in line with the excellent work that has been done at the Johns Hopkins Hospital by *Dr. Williams*. He also thought *Dr. Neale's* work would bear out the statements concerning the frequency with which deformed pelves are found in this country, and that this scientific work is interesting when compared with the statements made by *Dewees* in 1889, that deformed pelves were not found in this country, which opinion must have been formed in connection with the study of the aborigines. The work done by *Dr. Davis*, particularly in the line of estimating the relation between the container and the contained—the birth canal and the body to pass through it—is refreshing in obstetrics.

Dr. Kelly said he well remembered in his earlier days in Philadelphia, when he had the pleasure of doing several successful Cesarean sections, a number of friends were inflamed with an ardor to do the same thing. He was called to see a woman with contracted pelvis, upon whom it was proposed to do a Cesarean section, and found the head well down in the canal. He suggested that the patient might get through without an operation, but later he received a courteous note from the attending physician saying that he did not propose taking any chances of losing the patient's life, and would operate. However, labor came on rapidly, before a section could be done, the physician arriving just in time to put on forceps. He said this work was not in his line, and that he had merely started the discussion in order to draw out *Dr. Neale*.

Dr. Neale said he thought all present thoroughly appreciated the most excellent guidance of *Dr. Davis*. It is a teaching that has unquestionably come to

stay, and one which he sincerely hopes will be adopted more and more generally throughout this country, referring especially to pelvimetry, and particularly to the preliminary examination of all pregnant women prior to pelvimetry. He was very much pleased to hear *Dr. Davis* state that not so much reliance is to be placed upon the number of inches or centimeters in the dimensions of a given pelvis, but that we should consider whether a particular pelvis is capable of permitting the passage of a particular child, for in that lies the keynote that solves the whole problem. We cannot always positively foretell the character of the procedures to be followed in such cases of labor, for, as a matter of fact, pelves presenting the same measurements may give rise to different precautions and different procedures. He referred to one case, where after having opened the symphysis to its full extent, 9 c.m., he found that the delivery could only be accomplished after a most difficult operation, during which the child was lost; while, had the case been submitted to Cesarean section at once, the result might have been different and the child saved. It is rather difficult to determine what ought to be done in these cases prior to labor; perhaps by palpation or by manipulation under anesthetic as good conclusion can be reached as by pelvimetry, still uncertainty will follow these cases no matter what methods we use. *Dr. Neale* referred to a particular case, where upon examination he found a contracted pelvis, due to long-standing hip-joint disease. His first impression was that the patient would require, probably, a Cesarean section. In order, however, to have his views either disproved or substantiated he consulted with *Dr. Williams*. The woman was most carefully examined by pelvimetry, and under an anesthetic by manipulation; the opinion as to the indication of a Cesarean section was not concurred in, and the patient was allowed to go the full term, with the suggestion that possibly forceps might aid in the delivery. The woman did go the full term, forceps were applied, and after a most difficult operation, including considerable lesion on the part of

the mother, a female child was delivered, so that, notwithstanding the application of the excellent rules given by Dr. Davis, he felt that in this particular case the result was not, perhaps, what it might have been if Cesarean section had been adopted in the beginning, and that, try by all known means of accuracy, certainly it seems that errors will be made from time to time; this, however, should not deter us from resorting to all possible means of discovering the indications for these operations, and surely the method of resorting to preliminary examination is the most important.

Dr. Dobbin said he had been very much interested in what Dr. Davis had said, particularly on account of the fact that it is exactly in accord with the work done by Dr. Williams and himself some two years ago. He said the percentage given by Dr. Davis is higher than theirs, except those referring to operations. Dr. Williams, he said, was impressed with the belief that contracted pelves were not so rare in this country, and started out with the idea of proving that there were more than anyone had supposed, and that they would be found if careful measurements were made. The only statistics they found were those given by Dr. Reynolds of Boston, who had not measured all his cases, which accounts for the difference between his and their own.

Dr. Dobbin said the cases reported by Dr. Williams and himself were given in two groups. In the first, containing 100, fifteen pelves presented more or less severe degrees of contraction; the second group, containing 350 cases, showed 11 per cent. of contraction. They were surprised and somewhat disappointed that the percentages had not been higher.

Dr. Dobbin said he would like to ask Dr. Davis what his limits of measurement for the normal pelves were, and what he considered a contracted pelvis; also, if all the cases under consideration were measured, by whom it was done, and if the doctor had control of all the measurements.

Dr. Kelly said he could not let the old go out and the new come in without referring to two interesting cases. One occurred in a Pennsylvania city and an-

other in this State. The first was that of a woman who had had extremely difficult labor, and when she was pregnant the second time went to a certain physician, who told her she would have to have a Cesarean section performed to save her life and that of the child. She was very much depressed, but on her way home she met an old doctor, who asked what was the matter; upon being told, he said for her to wait until the proper time came, to send for him, and he would bring her through all right. She fell into labor, and after considerable mutilation on the part of the mother, they drew the body of the child out, but the head remained in the uteri; the problem was then solved in a peculiar way—they did a Cesarean section for the head, which they succeeded in delivering, and the woman died.

In the other case, the patient being a colored woman with some pelvic contraction, the physician determined that the woman must have a Cesarean section performed. She had fallen into labor, and, in attempting to draw off the urine there was great difficulty in passing the catheter; finally they succeeded in passing it, and upon withdrawing the catheter found it full of brains. When the child was subsequently delivered, the head showed a number of small holes, a condition which very much puzzled the neighbors to account for.

Dr. Cullen said he had recently heard of a case where Cesarean section had been performed for the delivery of the head.

Dr. Davis said he had very much enjoyed the discussion, and that he was pleased to know that Dr. Neale was with him as to the question of disproportion between the child and the pelvis, this being the cardinal point. He said he wished to call attention to one or two factors that help us out in the diagnosis. First, in hospital cases, we rarely see the father of the child whose interest we are studying; in private cases, however, we may observe the type. He referred to one case in Philadelphia, where the patient in her first confinement had lost a fine, large male child through an effort to deliver with forceps, the child's head being crushed and the mother being torn. He

then set to work to discover the reason why she could not have had a child born the first time. He found that the father was an exceedingly well-developed man, with a very large head, which, by the way, contained an active and valuable brain; the mother was small, though well nourished, and everything pointed to a large head on the part of the child. The mother was very carefully watched, and at the proper time labor was induced, and as a result a fine child was delivered without difficulty. About a week ago, Dr. Davis delivered her again of a large female child. The induced labor was decided upon not only in consideration of the pelvic proportions, but from a consideration of the size of the father also, for it was one that excess in the size of the fetus was to be expected.

Referring to the comparative advantages of symphysiotomy or Cesarean section, Dr. Davis said he could best sum up his experience by saying that symphysiotomy is a useful but disagreeable operation. He said he had one point to make regarding Dr. Neale's remarks about the uncertainty of the outcome in these cases. Sometime ago he was asked to see in consultation a woman who was in labor, and who had a contracted pelvis, but who absolutely declined to be taken to the hospital, and he declined to do any major operation because of the impossibility of asepsis. He told the family that the child would be born dead, and placing the patient in a sitting position on the edge of the bed, he proceeded to apply the forceps, and was very much surprised to deliver a living child..

Replying to Dr. Dobbin's question, he said the limits were as follows: A pelvic contraction was thought to be present when a diminution of 2 c.m. in any diameter existed; for example, a pelvis normal in every diameter except the antero-posterior, which latter fell short of the normal measurement, 2 c.m., was considered to be an abnormal pelvis. The total number of women examined and measured was 466, measured either by himself or by his first assistant; of this number, 153, or 32 per cent., had abnormal pelves.

Dr. Dobbin read a paper entitled "A

Demonstration of a Spondylolisthetic Pelvis."

Dr. B. B. Browne reported a "Case of Sarcoma of the Vagina in a Child Three Years Old."

Medical Progress.

HEMIPLEGIA WITH COMPLICATIONS.—

At a recent meeting of the Clinical Society of Maryland Dr. Robert Reuling reported "A Case of Right-Sided Hemiplegia Associated with Complete Hemianesthesia and Unilateral Muscular Atrophy on the Paralyzed Side." The author said that what was especially striking in the case was the advanced muscular atrophy of the right upper and lower extremities, particularly of the arm, none of the muscles being apparently spared. The right hand was slightly swollen (edema), especially the dorsum. None of the atrophic muscles showed fibrillary tremors. There was complete anesthesia to touch, pain and temperature, and absence of the muscle and stereognostic on the paralyzed side, there being complete hemianesthesia which ended abruptly at the median body line. The mucous membrane on the right half of the mouth and palate also showed a diminution of sensibility. The conjunctiva of the lids on the right side appeared less sensitive to painful impressions than that of the left. He said he did not believe the cornea was anesthetic, but since the studies of V. Frey and Nagel have shown that areas of anesthesia exist on the normal conjunctiva, and that a special instrument is required for such investigation, one could speak with but little certainty on the subject.

Dr. Reuling said as to the most likely pathological lesions which caused the paralysis, etc., in this case, there could be little doubt from the sudden nature of its onset that either a hemorrhage occurred in the brain substance or that a sudden disturbance in the blood supply of certain areas from thrombosis or embolism of the cerebral arteries took place. The mildness of the apoplectic insult—the patient not losing consciousness and her general condition improving rapidly—would suggest that if a hemorrhage was

the cause it involved no very large surface. The absence of the usual causes (mitral disease, infectious processes, recent labor, etc.) for the formation of emboli tends to exclude this etiological factor, and it seems more likely that a thrombus had formed in a sclerotic cerebral vessel, whose endothelium being injured, produced a favorable site for such a process.

That cortical lesions may produce hemianesthesia we see from the cases reported by Vetter, Nothmágel, Luciani, Starr and others. Dr. Reuling said that he believed only a comparatively small surface was involved in this case, and that it probably involved the sensory portion of the internal capsule of the left cerebral hemisphere. It is more difficult to exclude the sensory portion of the medulla, but there were no symptoms suggesting pressure on any of the cranial nerves. Of course, the facial was involved, but one could almost exclude the possibility of this being due to injury to the trunk of the nerve itself or its nucleus in the medulla, as the frontalis muscle was not paralyzed. Lesions in the lower portion of the medulla are very often associated with alternating anesthesia or bilateral hemianesthesia, in the latter instance one half of the body being usually more anesthetic than the other. These changes are, of course, due to the crossing of the sensory fibres in this portion of the medulla.

Dr. Reuling says there is at present no very satisfactory explanation for the muscular atrophy following cerebral lesions. Charcot and his pupils, Pitres and Brissand, believed it could be explained by the degenerations occurring in the pyramidal tracts, and that this extended to and gave rise to secondary degenerative changes in the motor cells of the anterior horn, and as these are also the trophic cells for the muscles, the muscular atrophy seemed easily explained. Senator in 1879, and later Baginsky, demonstrated that this muscular atrophy could occur without such changes in the anterior horn cells, so that the theory of the Charcot school no longer held good. Darkschewitzoch holds that the muscular changes are secondary to changes in the joints; but these are by no means

constant, although comparatively frequent complications. In this case no arthropathy existed, the increased size of the right hand certainly being due to a serous infiltration and probably a vaso-motor phenomena. Some observers still believe in the presence of special trophic nerves in the central nervous system and associate all such changes in the muscles, etc., to an interference in their functions. Dr. Reuling believes the views of Monakow explain the muscular changes better than those of any other observer. Monakow believes the atrophy is due to an absence or want of the several physiological impulses which are apparently necessary for the activity and growth of muscles, namely, the motor, sensory and vaso-motor impulses which are constantly present; it is, therefore, the injury of several sets of fibers conveying these that produce the degenerative changes. It is certainly striking how frequently sensory and vaso-motor phenomena are associated with the cases in which muscular atrophy appears soon after an intracranial lesion.

* * *

LIABILITY OF MASTER FOR ATTENDANCE ON SERVANT.—It is a well-settled doctrine, says Mr. Arthur N. Taylor in the New York Medical Journal, that the master is not by reason of his relation to the servant liable for medical attendance upon such servant. If, however, a physician is called by a master to attend a servant in his employ such engagement has been held to amount to a direct undertaking by the master to pay, but if he is called by the master's wife, even with an express agreement that her husband will pay, the husband is not bound unless it can be shown that the agreement is made with his knowledge and consent or that he subsequently ratified the hiring. The reason for this rule may be readily perceived; the husband is never bound by the contracts of his wife except for necessities furnished to her or to her children; therefore a contract imposing a liability upon him for medical attendance upon a servant, which he is not primarily liable to pay, is beyond the scope of her authority.

DIABETES INCIPIDUS AND HYSTERIA. Mathieu (British Medical Journal) has for long noted that polyuria was very often associated with hysteria. Babinsky made out that diabetes insipidus sometimes meant hysteria itself, all the other and far more familiar symptoms being absent. Suggestion, Mathieu finds, may make the polyuria disappear. A patient under the care of Lancereaux, who passed about forty-two pints of urine daily, was cured by small doses of table salt, which Thiroloix had substituted for the phenacetine originally prescribed by Lancereaux without letting the patient know that the medicine had been changed. Gilles de la Tourette, in a discussion on Mathieu's views, did not feel sure that polyuria and its cure by suggestion necessarily implied hysteria. Hayem noted that in diabetes insipidus the total excretion of nitrogen was usually increased. This contraindicated theories of simulation. Diabetes insipidus usually, no doubt, appeared in neuropathic subjects, but it could arise from quite different causes. Ehrard had observed that in this polyuria allied to hysteria chlorides were excreted in abnormal proportions. There was no increase in the excretion of urea; indeed that compound was usually diminished in amount in the urine of hysterical women.

* * *

DYSPEPSIA AND GASTRIC DILATATION. Sir William Murrell, in a clinical lecture in the Pacific Medical Journal, gives some points of difference and also the treatment of dyspepsia and gastric dilatation. Physicians too often accept the patient's diagnosis without further question. In dyspepsia alkalies increase acid secretions and decrease alkaline secretions, while acids have the opposite effect. Physicians should not always give the same thing. Gentian may fail where quassia, calumba and others succeed. Three drops of oil of cajepout on a lump of sugar or a small piece of bread, taken frequently, is agreeable and effective. Glycerine or glycerine of borax, with lemon juice, is very helpful in dyspepsia. Capsicum is drunkard's gastritis; if given in small doses is very good, and a few drops of the tincture of iodine in water

and a little glycerine will stimulate the gastric mucous membrane. Fraser of Edinburgh has recommended the bi-chromate of potassium, one-twelfth to one-sixth of a grain in a capsule, after meals. The indiscriminate prescribing of pepsin is not to be advised. The only way to treat a dilated stomach is by operation, by taking a tuck in the walls of the stomach, and this is easy and safe.

* * *

GLYCOSURIA IN DIPHTHERIA.—The occurrence of glycosuria in diphtheria has been noticed in a few cases, but few observers have been able to make a careful serial test in a large number of cases. Dr. Charles Simon of Baltimore has referred to this condition in a number of cases, and Drs. Cleon Melville Hibbard and Michael J. Morrissey, in the Journal of Experimental Medicine, have noted a number of cases, from which they draw the following conclusions:

1. There is a transitory glycosuria in diphtheria which is found frequently in the severe cases and is usually present in the fatal ones.
2. This glycosuria is often associated with albuminuria.
3. Injections of diphtheria antitoxine are occasionally followed for a few days by a slight glycosuria.

* * *

NIGHT SWEATS.—The treatment of night sweats in phthisis is very discouraging. The first thing to be thought of is atropine, either by the mouth or hypodermically. If it causes dry mouth it will have to be substituted by other things, and here the oxide of zinc with the extract of belladonna may be used. Aromatic sulphuric acid, or even ergot, may be tried. Agaricin is also a very good remedy which does not always fail in time of need. Frequently a combination of these remedies, and by alternating them, good results may be accomplished.

* * *

TWENTY THOUSAND LIVES SAVED YEARLY.—According to the North American Medical Review, England, by the maintenance of special hospitals for her consumptives, saves the lives of 20,000 of her inhabitants yearly.

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BALTIMORE, APRIL 1, 1899.

THE tendency of modern times is to explain, or to attempt to explain, everything, and busy investigators do not spare the sacred book of Prophets. in their endeavors to clear up, according to our modern light, the occurrences narrated there.

Dr. James Weir, Jr., of Owensboro, Ky., has contributed an article to the *Denver Medical Times* in which he asserts that, judged by modern alienism, many of the prophets, both major and minor, and of sacred as well as profane history, were undoubtedly the victims of mental dyscrasias. This he not only attempts to prove from sacred history, but by what Egyptologists and Assyriologists have given us through long and faithful study.

The ancients believed that the insane were the especial wards of divinity, and this belief is still current at the present day among some of the Eastern nations. The insane man was supposed to be in direct communication with God. The ancient Hebrews used the same word to designate the religious lunatic and the holy prophet. Saul was troubled by an evil spirit, and "prophesied" is translated now as meaning that he was a lunatic and raved. He was seized by religious mania at times, especially when he sent for David to soothe him with his harp and hurled javelins at him. It was then his friends

said, "Is Saul among the prophets?" meaning "Has Saul become insane?"

In the same way the author explains the peculiar performances of Ezekiel, Hosea, Isaiah and Jeremiah. He even goes so far as to say, which, of course, has been said before, that the Revelation of St. John were evidently the result of mental dyscrasia, supposing, of course, that John thought he saw these things, but if he is only speaking metaphorically then no charge of insanity can be brought against him. He thinks that Saul, afterwards called Paul, was a victim of epilepsy.

In later times such men as St. Anthony, Ignatius Loyola and Francis de Assisi were also victims of insanity. Jeanne d'Arc, Savonarola, Luther, Huss, Joseph Smith, Swedenborg, Mahomet and many others were also mentally unsound, and much has been written of the insanity of Richard Wagner.

While the writer does not bring forward anything especially new, it is interesting in that it shows the eccentric and especially clever persons were looked upon as mentally unsound. The alienists at the present day leave no ground, however sacred, untouched, and they attempt to explain from our present knowledge many things formerly obscure and mysterious.

* * *

SOME time ago it was urged on the profession through these columns that physicians of Maryland, as far as practicable, leave a written request or **Gifts to the Library.** distinctly state it in their wills that their medical books be left to the Faculty library. As a rule, a medical library is of little or no value to a physician's family after his death, unless there be another physician in that family to inherit it. It is with great pleasure and gratitude that the Faculty has received from Mrs. George H. Rohé the library of her late husband, Dr. George H. Rohé, whose proficiency in so many different lines had caused him to collect books of especial value. Dr. Rohé left no will, and hence the gift of these 500 or more books was due alone to the liberality and generosity of his widow, who acted in a very wise manner in carrying out what she supposed would have been his wishes. The Faculty library is growing more and more to be a necessity to the medical profession of the State, and with a little more strength the plan may be carried out of having a number of duplicate books kept at various points throughout the State for the benefit of those who cannot reach Baltimore.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending March 25, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	..	..
La Grippe.....	..	7
Pneumonia.....	..	16
Phthisis Pulmonalis.....	..	18
Measles.....	8	..
Whooping Cough.....	..	..
Pseudo-Membranous Croup and Diphtheria. }	32	6
Mumps.....	..	..
Scarlet Fever.....	13	..
Varioloid.....	..	..
Varicella.....	2	..
Typhoid Fever.....	2	1

Dr. Maris has removed his offices to 1215 Linden avenue, Baltimore.

Dr. James J. Mills has been appointed one of the oculists to Bayview Hospital.

Baltimore has an anti-vaccination society, which has regular meetings and sends out literature.

The nurses of the Baltimore Medical College have opened a new home next to the college building.

The German government has appropriated \$14,280 to send Dr. Robert Koch to the tropics to study malaria.

The number of smallpox cases in Baltimore is slowly increasing and vaccination is the order of the day.

At the beginning of the year there were 17,735 persons practicing medicine in France. A year ago there were only 15,984.

A new medical society in Paris is called the "Société d'Obstetrique de Gynecologie et de Pediatrie." Pinard is the president.

The death is announced of Prof. Gustav Heinrich Wiedemann, professor of physics and chemistry at Leipsic. He was seventy-two years old.

Professor Charles Sedgwick Minot of Harvard Medical School will be the commencement orator at the Yale Medical School in June.

By the will of the late Edward Austen of Boston, Harvard University will receive \$500,000 and Harvard Medical School Bacteriological Laboratory \$10,000.

The Harford County Medical Association will hold its next meeting in the Town Hall in Bel Air on Monday, April 10, at 11 A. M. Drs. Finney and Kelly will read papers.

Dr. Alexander J. C. Skene of Brooklyn has resigned from the presidency of the Long Island College Hospital and has accepted the presidency of the Hospital for Breadwinners.

The Chicago, Milwaukee & St. Paul Railroad has given all its employes some instruction in minor surgery and nursing, so that in accident cases immediate aid may be at hand.

According to the last *Public Health Reports*, there have been since the first of the year 241 smallpox cases in Louisville, 300 cases in Alexandria, 571 cases in Norfolk, 567 cases in Newport News and 53 cases in the District of Columbia.

The managers of the Maryland Homeopathic Hospital have enlarged and refurnished their building on North Mount street, Baltimore. The hospital now has fifty beds and fourteen pupils in the training school.

Dr. Herbert Harlan states that he will meet the Dorchester county physicians at Cambridge April 5, and not April 4, as stated in the programme. His subject is "Grippe and Some of its Ear Complications."

The courts have decided that the Medico-Chirurgical College of Philadelphia, with an amended charter, has the right to grant diplomas and degrees. The Philadelphia Dental College tried in vain to prevent this.

Philadelphia has had forty-five cases of epidemic cerebro-spinal meningitis, with fifteen deaths, and in the past week 1570 cases of typhoid fever, with 164 deaths, have been reported, and since January 1 there have been 3649 cases, with 380 deaths.

The forty-sixth annual meeting of the North Carolina Medical Society will be held in Asheville, N. C., on May 31. The Board of Medical Examiners will meet on Thursday, May 25, and will be in session six days. Dr. Battle is chairman of the committee of arrangements.

By the liberality of Mrs. George H. Rohé, the library of the Medical and Chirurgical Faculty has received the valuable medical library of the late Dr. George H. Rohé. This contained over 500 books, besides rare monographs. They will at once be catalogued and become accessible to the members.

Washington Notes.

There are fourteen cases of smallpox at the hospital, a few cases coming in to take the place of those discharged. Monday there were three new cases added and seven old ones discharged.

A small panic was created at Fredericksburg, Va., Tuesday by the discovery of half a dozen cases of smallpox. The outbreak has been traced to the National Bank Building. Compulsory vaccination is being enforced.

The District commissioners have given authority to Health Officer Dr. W. C. Woodward to have cleaned and disinfected any premises likely to be a source of danger, even though they may not be known to be actually infected with smallpox or other disease.

At the District Medical Society Wednesday evening the following subjects were presented: "Chronic Pemphigus of the Larynx," with specimens, by Dr. Bryan; "Cerebral Hemorrhage, Cerebro-Spinal Meningitis, Renal Cyst," by Dr. Lamb; "Fused Kidney," by Dr. Hicking.

The cerebro-spinal meningitis death-roll now numbers thirty-four, three deaths being reported yesterday. This is the fifth week of the epidemic and the indications are that the disease has a firm grip on the southwestern part of the city, where 90 per cent. of the cases have occurred. The health authorities are inclined to believe that the disease was brought in by the troops passing through the railroad yards in that section of the city. While this may prove a satisfactory explanation, we know from the history of cerebro-spinal meningitis epidemics outbreaks may occur now and then simultaneously in regions as widely separated as Europe and America; that they may occur in city and rural districts, in the salubrious and unhealthy alike. While there are a few cases in some of our cities every year, notably New York, the three great epidemics in this century are as follows: First from 1805 to 1816; second, 1837 to 1850; third, 1856 to 1868. These epidemics completed their cycle of progress in from ten to fifteen years, the initiatory one making its appearance at Geneva. Again in 1874 there were epidemics in most parts of this country. In 1893 the disease was prevalent in New York and parts of Maryland. In 1896 and 1897 Boston was visited, and at the present time small epidemics are seen in several of our Eastern cities.

Book Reviews.

AN ATLAS OF BACTERIOLOGY: Containing One Hundred and Eleven Original Photomicrographs, with Explanatory Text. By Charles Slater, M.A., M.B., M.R.C.S. Eng., F.C.S., Lecturer on Bacteriology, St. George's Hospital Medical School, and Edmund J. Spitta, L.R.C.P. Lond., M.R.C.S. Eng., F.R.A.S., formerly Demonstrator of Anatomy, St. George's Hospital Medical School. Pp. xiv-120. Price \$2.50. London: The Scientific Press; Philadelphia: J. B. Lippincott Co. 1898.

Notwithstanding the rapid progress which has been and is being made in photographic illustration of medical text-books, the results have thus far not been wholly satisfactory, and one approaches a book entirely illustrated in the photographic way with some trepidation. In the volume before us we find, we are glad to say, an agreeable surprise, for the illustrations are, on the whole, magnificent. The photographs of the various forms of bacteria are excellent and it is hard to conceive of better reproductions of the originals than these. The book is provided with a photographic introduction in which are described briefly but adequately the essential points of modern photomicrographic technique. This is followed by a bacteriological introduction in which the bacteria in general are briefly dealt with. The bulk of the volume is occupied by clear descriptions of all the well-known varieties of pathogenic bacteria. We miss bibliographical references, but the book is not intended to replace text-books on the subject.

At the end of the volume malarial plasmodia are illustrated, though not so successfully as the bacteria in the preceding sections. It is rather a pity that the estivo-autumnal parasite is not so labeled. In this volume the malarial parasites are divided into benign (which do not form crescents) and malignant (forming crescents). Here and there a misprint is noticeable, for example, by MacCullum on page 106, the authors evidently meaning MacCallum.

The bookmaking is superb. In this respect it is one of the best books put upon the market in recent years. For those to whom Fraenkel and Pfeiffer's Atlas is not accessible this book should be of great service.

Remarks at the Presentation of the Candidates for the Degree of Doctor of Medicine at the Commencement of the Johns Hopkins University. By William H. Welch, M.D. Reprint from the *Johns Hopkins Hospital Bulletin*.

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Original Articles.

THE ANTIPERIODIC TREATMENT OF INSANITY.

By Edward Anderson, M.D.,

Rockville, Md.

IN view of the vast increase in the number of cases of insanity of late years, particularly among the negroes, it behooves us general practitioners, to whom most of the cases are first referred, to see to it that they receive the proper treatment at once.

In my experience, malaria is one of the most common causes of insanity, and when it is the cause the case is amenable to antiperiodic treatment only, but it must be treated vigorously and often for a lengthy period. I now treat all cases of insanity with antiperiodics, and often succeed in curing them when no evidence of malarial poisoning is present.

Some years ago I published an article in the *Medical News* entitled "Insanity Cured With Quinine." In that instance a woman, between seventy and eighty years of age, suddenly became a raving maniac and did not improve in the slightest degree until I put her on large doses of quinine, when she immediately began to improve, and in a short time was well. Had this woman been sent to an asylum, with her family history of two daughters insane, she would probably have remained there to the present time, six years, whereas she has been a useful woman during that period.

A short time since I was called to a very sad case of melancholia in a woman

sixty years of age. I found her locked up in a room by herself and moaning as if her heart would break. Her wrists were excoriated where she had been tied to prevent her from destroying herself, which she had frequently attempted to do. There was no rise of temperature in this case and no other evidence of the presence of malaria, yet I put her on heavy doses of quinine, which has caused her malady to take on an intermittent form of a much milder type, and I believe, in time, will effect a perfect cure. I was not called to this case for the purpose of treating it, but merely that I might be able to testify before the jury which was to commit her to an insane asylum.

It is singular how long malarial parasites will sometimes remain in the system without producing symptoms, when suddenly an attack of insanity will supervene which will go on forever, unless antiperiodic treatment is instituted. Malaria is also frequently the indirect cause of insanity producing epilepsy, which generally results in imbecility. A child will have a chill say every other day, but after a while a convulsion will take the place of the chill and, if not properly treated, the case will run into one of epilepsy. After a time, the periodicity is lost, but the remedies remain the same, though they are not often applied.

In treating insane epileptics the coal-tar preparations are to be preferred at first, and quinine and arsenic later on, for they act not only as antiperiodics but antispasmodics as well. I prefer them to the bromides in the treatment of convulsions in children, particularly where there is febrile action present.

A prominent physician of this State, and one whose word I would not for a moment doubt, told me he knew a confirmed epileptic, who had also been an imbecile for many years, completely restored to reason and usefulness after an attack of malarial fever. I asked him if quinine had been used in the case. He said "Yes, freely."

I believe there are many insane persons languishing in institutions who might be released from a condition worse than death by the proper employment of antiperiodics.

THE TECHNIQUE OF RADIOGRAPHY.

By Alex. L. Hodgdon, M.D.,

Professor of Nervous Diseases and Diseases of the Mind, Maryland Medical College. Neurologist to the Home for the Aged.

As is well known, certain firms put up special plates for radiographic work, and these plates are enclosed in light-proof envelopes. Such plates seem to be very popular with many radiographers. Other operators in this line use some one of the many good plates upon the market by placing it in a plate-holder, but may be inconvenienced by being compelled to have a number of different sized plate-holders.

In order to simplify the process I have been wrapping my Hammer Extra-Fast plates (which is the make of plate I use in this line of work) in envelopes which I make myself out of a woven black paper, known as tailors' pattern paper. These envelopes can be readily made by the use of the paper and a little photo-library paste; they can be sealed at all ends with the exception of one, which end can be folded over after the plate has been inserted, and the envelopes can be used over and over again. They can be made of different sizes from 4x5 to 10x12, or even to fit the very large plates.

It would seem hardly necessary to mention that all plates should be encased in envelopes in a dark room by the aid of a ruby lamp.

REPORT OF PROGRESS IN DERMATOLOGY.

By T. Caspar Gilchrist, M.D.,

Clinical Professor of Dermatology, Johns Hopkins University; Clinical Professor of Dermatology, University of Maryland.

PERSISTENCE OF SYPHILITIC INFECTION.

At the annual meeting of the Italian Society of Dermatology and Syphilography, 1897 (abstract *British Journal of Dermatology*, January, 1899,) Professor De Amices called attention to a case of syphilis in which great persistence of infection was demonstrated without having presented actual lesions of the genitals. The patient was a man who, having been infected, married a healthy woman. Two abortions and four live births resulted, two of the children being syphilitic. The husband died of cerebral syphilis. The wife married again, and, although the second husband was healthy, three abortions and two infected children resulted. The mother had never shown any signs of syphilis and had received no treatment. The period of observation covered fifteen years.

RINGWORM IN BOSTON.

"Ringworm As It Exists In Boston" is the title of a paper by C. J. White of Boston (*Journal of Cutaneous and Genito-Urinary Diseases*, January, 1899). He publishes the results of a careful and painstaking investigation of 279 cases of ringworm as met with in the skin clinic of the Massachusetts General Hospital. After considering the subject clinically, microscopically, culturally and morphologically he agrees with Sabouraud and Colcott Fox that ringworm should be divided into two great heads, the microspora (small-spored variety) and the megalospora (large-spored variety). Sabouraud believes the two are distinct species, but White could not convince himself that such was the case. Of the cases examined 52 per cent. were due to the microsporon and the scalp was the seat of the disease in 88 per cent. of the cases.

A fact of some importance established by White is that a ringworm of the scalp in a person over thirteen years of age is usually caused by a megalosporon. The

microsporon produces a clinical picture which is constant, and the disease appears on the scalp as round areas, which is covered with short hairs and dirty scales. In the very small areas a heaping up of scales is found about one or two hairs. Under the microscope the plant appears as a mosaic of glistening, round spores two or three micromillimeters in diameter encircling the hair.

White considers this form of ringworm much more benign in Boston than that which occurs in Paris and London, and the treatment which is adopted at the Massachusetts General Hospital usually results in a cure after six months' application. The treatment consists in epilation by the mother of the short hairs in the patch and around it, washing with Castile soap and warm water every morning and the application of the following ointment:

- R. Sulph. flor., dr. i.
- Acid carbohc, dr. i.
- Naphthol, dr. ss.
- Adipis, oz. i.

With reference to the megalosporon, White's investigations show that it occurs at almost any age from two weeks to fifty-three years.

Ringworm of the scalp, due to the large-spored variety, is rare in Boston, only 3 per cent. of the scalp cases being caused by this species. The diseased patch is not round, as in the microsporon variety, but irregular or oval. The area instead of being covered with ashen-gray scales is red and looks eczematous. The short hair stumps are absent, but a few long, rather swollen hairs are usually present. The spores are usually quadrangular, with rounded corners, and are much larger than the microspora. The mycelium resisted disintegration even when it was subjected to a boiling temperature for some moments. The megalosporon which attacks the scalp has been described by Sabouraud as an endothrix in contradistinction to the second subvariety, ectothrix, which constitutes the form attacking the beard.

Treatment of these scalp cases is much more severe than in the small-spored variety, and one has to perform epilation and apply such drugs as mercury, chrysarobin, pyrogallie acid and formaldehyde,

Ringworm as it occurs on the body (face, neck, extremities, trunk) belongs to the endothrix variety of megalosporon. The lesion commences as a small papule, which frequently becomes vesicular and later is covered by a greasy, yellow scale. Gradually the margin advances and the center levels down, the circumference, when undisturbed, consisting of vesicles or scale-capped papules. Only the lanugo type of hair is affected in this variety of ringworm. In cultures the variety always presents the same picture.

In the treatment the white precipitate ointment is sufficient to cure the disease.

The second variety of megalosporon or ectothrix presents two clinical pictures, either a superficial scaling variety or a deep, suppurating form. Sabouraud believes this variety to be always of animal origin, and all of White's cases occurred in males. The mild type presents a very constant appearance. It begins as a small, superficially scaling area in the bearded face. The scales are grayish, the disease gradually spreads and very small pustules around lanugo hairs make their appearance. If left alone the hair tends to fall. The severe variety commences as a pustular inflammation round the hairs, and presents a picture which is usually described as tinea sycosis. The observation of Sabouraud that this variety of ringworm was pyogenic is confirmed by White, the usual pus cocci being absent in the pus.

The treatment of the severe suppurating lesions consists of thorough surgical measures, and the milder cases even often require severe treatment, such as scarification and curetting.

THE TREATMENT OF SYPHILIS WITH INJECTIONS OF SUBLIMATE IN HIGH DOSES.

Kapfer (*Prag. Med. Woch.*, Nos. 1-4, 1898,) gives his results in the treatment of 127 patients with the method recommended by Lukasiewicz. He injected every five or eight days a 5 per cent. solution of sublimate into the gluteal region between the two trochanters. Only a few complained of the infiltrations. Stomatitis and diarrhea appeared in 15 and 12 per cent., respectively, of the patients. The author prefers the sublimate to the salicylate of mercury because of the dangers

which may result in the latter from accumulation of mercury.

TOXINES IN DERMATOLOGY.

H. Hallopean discusses this subject in the *Annales de Dermatologie et de Syphiligraphie* (viii, p. 854, 1897), and he emphasizes the fact that toxines play a very important part in the production of dermatoses, and he even goes so far as to assert that they are the immediate cause of the great majority of cutaneous diseases. He applies the term toxines to "all morbid substances produced by living organisms," so that stings of insects, jellyfish, certain vegetable poisons, etc., are regarded as toxines. He explains the pruritus of jaundice, the eruptions and pruritus of diabetes and the eruptions caused by abnormal renal secretions as being due to alteration in the quality of or excessive variation in the quantity of the normal products of secretion. The toxines of microbic origin which are produced in the alimentary canal are a frequent cause of cutaneous diseases. The eruptions which sometimes occur in the course of diphtheria, gonorrhea and the exanthematous eruptions are probably produced by the toxines resulting from the respective micro-organisms. Hallopean thinks that toxines may be the cause of such diseases as acute eczemas, psoriasis, pemphigus, etc.

TREATMENT OF ECZEMA.

Allan Jamieson, in the *Edinburgh Medical Journal* (January, 1898,) describes his recent experience in the treatment of eczema of the palms and soles according to the method devised by Unna. The palms or soles are first poulticed every four to six hours with starch poultices, to which boric acid is added. A good deal of the sodden epidermis is removed by rubbing with a rough, soft, dry cloth between the changes of poultices. In about four or five days the palms become soft, smooth and pliable. The following ointment is now applied:

- R. Acidi pyrogallici oxidati, gr. v-xxx.
- Lanolini, oz. ss.
- Ol. amygdal., dr. ii.
- Aq. distilled, dr. ii.

Jamieson has tried this treatment in six cases, and the results have been excellent.

After the cure only the blandest soap should be used.

SOME PRACTICAL HINTS.

In the *British Journal of Dermatology* (October, 1898,) H. Skinner, under the title of "Pharmaceutical Notes," offers the following suggestions. A liquid soap which he has found very useful in dermatological practice consists of oleic acid, 2 ounces; alcohol, 90 per cent., 3 ounces; solution of ammonia, a sufficiency, and water to 6 ounces. The ammonia is added drop by drop until the odor can faintly be detected. It is then allowed to stand for seven days and filtered through kaolin.

He also recommends as an excellent base for cutaneous remedies yolk of one egg triturated with one-half ounce of lanolin, and then one-half ounce of rose water to be gradually added; zinc oxide or ichthyol can be added. A creamy emulsion can be obtained by adding milk.

A very absorbable base is the following: Wool-fat, one-half ounce; glycerine of starch, one-half ounce, and white vaseline, one drachm. The author says that this is absorbed better than any ointment he has used.

As a good general ointment for the usual run of eczemas he recommends anhydrous wool-fat, one-half ounce; camphor, thirty grains; glycerine of subacetate of lead, one-half ounce, and coal tar if indicated.

* TATTOO SYPHILIS.

In a paper by T. Thomas in the *British Journal of Dermatology* (November, 1898,) three cases are recorded of tattoo syphilis. The operator was attached to a traveling show, and he made use of his own saliva to moisten the skin when it was to be tattooed. The patients were all young men, and chancres developed at the site of the tattoo. In Case I a figure of Venus was depicted on the forearm; two chancres appeared later, one on the right breast of Venus and the other on her right knee. The chancres were followed later by other symptoms of syphilis.

SALICIN.

In Professor Schwimmer's *Festschrift* (*Abstract. Archiv. für Dermat. u. Syphil.*, XLVII, p. 113, 1899,) is a paper by H. R. Crocker on salicin in the internal treat-

ment of cutaneous diseases. He has tried salicin in 200 cases of psoriasis, and he compares the results with arsenic and thyroid extract. With the use of salicin he has shown that the progress of the disease is interrupted at once even when the lesions are markedly hyperemic. The acute redness and irritation disappears, the scale formation is lessened and the older scales are much softened. The disappearance of the lesions takes place in the usual way, i. e., by clearing up in the center first. The best results have been obtained with salicin in the guttal form of psoriasis. When only a few chronic patches were present then better results followed local treatment. In psoriasis of the scalp the exclusive use of salicin was not the best form of treatment. Four cases each of lichen planus and of pityriasis rosea were also treated by salicin and cures were obtained in all cases. Salicin was not efficacious in acute eczema, but in one case of lupus erythematosus the practical disappearance of the eruption followed. Crocker explains the action of the drug by the fact that the salicin forms salicylic acid in the blood, and this acts as a microbicide against the organisms which probably play an important part in the blood in these diseases.

REPORT OF PROGRESS IN DISEASES OF THE EYE AND EAR.

By Hiram Woods, M.D.,

Clinical Professor of Eye and Ear Diseases, University of Maryland; Surgeon to the Presbyterian Eye, Ear and Throat Charity Hospital, at Baltimore.

IN the London *Lancet* for December 12, 1897, Dr. Henry E. Juler publishes an address on Syphilitic Diseases of the Eye and Its Appendages.

Venereal sores of the eyelids are always hard or infecting. Chancroids are never seen here. According to Parras, not one authenticated case is recorded. The English authority on syphilis (Jonathan Hutchinson) says chancroids are seldom seen except on the genitals. Chancres generally involve the palpebral conjunctiva. Sometimes they are limited to the

cutaneous surface, sometimes at the margin, involving both skin and conjunctiva.

The frequency of primary syphilitic lesion of the lid varies in different countries, according to De Beek—in France, one palpebral chancre in every 500 cases of syphilis; in England this is excessive; in Germany likewise. The writer reports a few cases. Kissing the eyelids by the possessor of mucous patches is a means of infection. Digital is, perhaps, the most common mode of inoculation. Chancres of the lid are always accompanied by cervical adenitis, pre-auricular or submaxillary, usually both. Rodent ulcers, chalazion, hordeolum, etc., are not as a rule accompanied by adenitis. Of course, an adenitis may occur with these affections, but it is not present as a sequel. When adenitis occurs as a sequel of suppurative tarsal tumors, styes, etc., the glands are painful and characteristic symptoms of inflammation are present.

In syphilitic adenitis only enlargement is present. Tubercular lid ulcer may be mistaken for a chancre, but the former is never indurated and is quite rare. Gummata occasionally appear in the skin and subcutaneous tissue superficial to the tarsus. They may develop in the tarsus also. These lesions ulcerate early. Trousseau (*Société Française d'Ophthalmologie*, 1888) says gummata of the lid resemble an acutely inflamed chalazion with edema of the lid, the skin being dusky red with cervical adenitis and mucopurulent discharge. Primary syphilitic dacryo-adenitis has never been observed. Bull says he has seen hypertrophy of the lacrimal gland (excessive connective tissue and gummatus infiltration). The patient died from a gumma of the dura. Syphilis complicates the lacrimal passages rather frequently. The puncta and canaliculi may be obliterated by cicatrization following a chancre or tertiary ulceration. During the secondary stage secretion may be pent up in the sac from inflammatory swelling of the periosteum of the nasal duct or by a mucous patch at its opening in the inferior meatus, producing at first a catarrhal dacryo-cystitis which becomes purulent. Lacrymal abscess generally occurs in the late stage. Tertiary lesions

may obliterate the lumen of the canal. Periostitis is generally followed by caries-necrotica.

Of the orbit, the upper and outer angle, external angular process of frontal bone, is the part usually affected by a gumma. It is generally started by a blow. The diagnosis will be made by the history, gumma generally being found elsewhere. Gumma here may produce dislocation of the globe diplopia, mechanical ptosis, etc. Retro-ocular neuritis is marked by rapid failure of vision, one eye usually, often accompanied by pain and tenderness in the neighborhood, absence of ophthalmoscopic changes and a tendency to recovery. Central absolute scotoma may be produced. The author had the opportunity of seeing pronounced papillitis in cases of retro-bulbar interstitial optic neuritis caused by syphilis. It is usual to find pallor of the disc without preceding papillitis. Interstitial keratitis is commonly seen in hereditary syphilis. Its value as a diagnostic sign cannot be overestimated. This affection is almost pathognomonic of inherited syphilis. It is unknown in the acquired form.

Syphilitic episcleritis and gummata of the sclera are not separate affections. This manifestation is recognized as a circumscribed growth superficial to the sclera and in the ciliary zone. The lesion is yellowish-white in color and not very vascular. The conjunctiva covering it is much inflamed. Syphilitic iritis presents three varieties—plastic, serous and so-called gummatous. Rheumatism, gout, gonorrhea, diabetes, etc., may also cause plastic iritis. Characteristic symptoms are ciliary injection, contracted and inactive pupil, loss of brilliancy (color changed to green in a blue eye, dirty mud color in a brown eye), with visual acuity much diminished, and pain. Iritis is apt to appear between the fourth and ninth month of the disease. Syphilitic iritis occurs in 4 per cent. of all cases. Deposits on the iris and within its parenchyma, of circumscribed nodules of lymph, chiefly near the pupillary margin, multiple and orange or rust color, have received the name of "iritis gummosa." This form makes up about 18 per cent. of all cases of specific iritis. In cases of plastic iritis

the absence of these specific changes does not exclude syphilis. Gummatous iritis, so called, occurs as a secondary manifestation, but it may occur in a later stage. A plastic iritis, if neglected, may present the gummatous form later. A broad posterior synechia will generally remain. Sometimes these nodules are so large that they form an anterior synechia.

Granuloma of the iris may be mistaken for a gummatous iritis. This form is not syphilitic. The former are pale, translucent, gray deposits. They clear up without leaving any visible change in the iris and never form synechia. In association with inflammation of the ciliary body a form of iritis (serous iritis) occurs. Juler proposes a better name—sero-plastic irido-cyclitis. Iritic adhesions may occur, showing that the iris is inflamed, and lymph is thrown out, but the evidence of cyclitis is predominant, viz., keratitis punctata, deep anterior chamber, increased intra-ocular tension and possibly atendency to dilatation of the pupil rather than a congestive myosis. This form usually attacks both eyes, and usually clears up. It is better to use the mixed treatment than either hydrargyrum or kalium iodide alone. Iritis gummosa may be mistaken for "tubercular iritis." In both we find tumors of the iris and plastic iritis usually. Tubercular growths are mostly white, start at the periphery and grow inwardly. The dead white may be mistaken for corneal opacities. Sometimes the tubercular deposit is marrow red, but never orange color. The subjective symptoms of gummatous iritis are wanting in tubercular iritis. Tension is reduced generally. In gumatous iritis it is normal.

Putting aside syphilomata, the inflammatory changes which take place in the choroid may be grouped as follows: Disseminated, diffuse (always associated with retinitis), macular and peripheral choroiditis. Any of these may be found combined with another. It is not uncommon to see the diffuse follow the disseminated form. It is well to bear in mind that the retina is always involved, even if the lesion be focal. If one of the patches, in disseminated choroiditis, is present at the macula, there will exist a central

scotoma. All syphilitic lesions of the choroid manifest themselves as late secondary symptoms; may be seen in the tertiary stage. Progressive choroiditis may follow irido-cyclitis four years after the chancre. The earlier the choroiditis develops the more active the inflammation. Disseminated or focal choroiditis is usually an active inflammation. The lesions are seldom seen during the period of exudation owing to the accompanying hyalitis, the vitreous being cloudy from floating opacities. Red reflex only is gotten by the ophthalmoscope.

The yellow nodules or focal lesion are sometimes visible. Retinitis in association with choroiditis is the most common form of retinal inflammation. We meet with it in syphilis. It is preceded by choroiditis passing almost imperceptibly into chroido-retinitis. The essential features are the following: Papillitis, patches of exudation, cloudiness and hemorrhages. These changes mostly take place at the disc and macula regions; ophthalmoscopically these changes may be mistaken for albuminuric retinitis. Again, syphilis may be its forerunner, previously setting up an interstitial nephritis. Lardaceous changes in the kidney may be attended with retinitis or hemorrhages. The retinitis of Jacobson is not in this category. It is a primary syphilitic retinitis, attended with marked cloudiness of the retina, slight papillitis, distension of the retinal veins, white spots and hemorrhages.

Papillitis is often seen in syphilis. It may be monocular or in both eyes. It may be associated with retinitis or some intracranial trouble. Double papillitis is generally caused by an intracranial gumma.

ATROPINE IN DELIRIUM TREMENS.—Towonne (*Therapeutic Gazette*) finds that the injection of about one-sixtieth of a grain of atropine in delirium tremens causes quiet and later sleep in the majority of cases so treated.

PHLEBITIS.—The treatment of phlebitis in the course of such wasting diseases as pulmonary consumption is very unsatisfactory. Heat, warm applications and other forms of counter-irritation may afford temporary relief, but effect no cure.

Society Reports.

NEW YORK ACADEMY OF MEDICINE—SECTION IN ORTHOPEDIC SURGERY.

MEETING HELD FEBRUARY 17, 1899.

HYPERTROPHY OF THE TIBIA.

DR. S. KETCH presented a girl of four years of age whose right tibia was greatly lengthened and thickened, with decided anterior bowing. He had first seen the patient in December, 1898. The epiphyses were thickened, but the enlargement was not confined to them. It was most marked at the middle of the shaft, but included the whole bone, as was seen by the *x*-rays. Length—right leg, $19\frac{1}{2}$; left leg, $18\frac{3}{4}$; right tibia, $9\frac{1}{4}$; left tibia, $8\frac{3}{4}$. Circumference—right thigh, $9\frac{1}{2}$; left thigh, $10\frac{1}{4}$; right calf, $8\frac{3}{8}$; left calf, $7\frac{3}{8}$. The disease had begun eighteen months ago, with a small lump on the leg and pain at night and when she walked. This was Dr. Ketch's second patient of the kind. The first one was a girl eleven years of age, who had been presented to the Section in November, 1897, and had been operated on for the purpose of shortening and straightening the bone, and had again been before the Section in March, 1898, with resulting improvement and ability to walk about. (See *MARYLAND MEDICAL JOURNAL*, January 8, 1898, pp. 224, 225, and August 27, 1898, pp. 804, 805.)

The bone had been found to be solid, the cavity being obliterated. Neither of the patients had received any benefit from anti-syphilitic treatment. There was doubt as to the cause of this growth of the bone. It was not improbable that the trouble began in the periosteum. It was a question whether something ought not to be done early in the way of an operation to arrest the process, such as an incision through the periosteum, which might at least relieve the tension.

Dr. T. H. Myers said that this affection was extremely rare. He did not think that any drug could produce a material improvement, though it might prevent further progress of the disease. Such cases were sometimes assumed to be syphilitic for lack of better information,

though no history or symptoms of that infection could be elicited.

Dr. V. P. Gibney suggested a linear incision through the periosteum, and if that could be done with perfect safety, going farther by denuding the bone from the anterior surface and shaving off the redundant portion, suturing the periosteum and letting it heal primarily. The growth in length could not be stopped except by attacking the epiphysis, which would be hazardous.

Dr. H. Gibney said that in addition to the treatment which had been suggested he would go further and complete the operation, straightening the leg by the removal of a wedge-shaped piece of the bone and maintaining the correct position by plaster of Paris dressings.

Dr. Myers thought that incision would only relieve the pain. He would not operate until the child had attained its growth or the disease had stopped.

Dr. G. R. Elliott said that it was of pathological interest that the tibia alone was affected while the fibula remained normal. There was but little deformity compared with the decided bowing, which had been an indication for operation in *Dr. Ketch's* former patient, in whom the pathological findings were diffusely distributed throughout the entire thickness of the bone. He asked what effect tying the nutrient artery of the bone would have on the progressive atrophy.

Dr. Ketch said it would probably stop the growth of the bone.

Dr. Elliott suggested the possibility of resulting necrosis.

Dr. A. B. Judson said that if the whole limb were affected symmetry might possibly be promoted during the growing period by checking the vascular supply of the larger limb, by bandaging or lacing the whole limb and increasing the vascular supply of the smaller limb by venous compression. At the same time the functional activity of the one could be lessened and that of the other increased by the use of an ischiatic crutch or other apparatus having the same effect, with a high sole under the shorter limb. But as the diagnosis was absent and the pathology unsettled he could not suggest a reasonable treatment.

Dr. Ketch said that at an earlier stage some of the operative procedure suggested might have arrested or prevented the abnormal growth of the bone, but, on the other hand, they might have promoted it. He was opposed to the removal of a portion of the bone during the growing period. As the parents of the child desired active treatment an incision might be recommended as likely to stop the pain, which he thought was due to tension.

ENLARGEMENT OF THE EPIPHYSES.

Dr. Myers presented a girl, sixteen months of age, whom he had seen for the first time on January 10, 1899. The epiphyses of the radii, femora, tibiae and the entire phalanges of several fingers were enlarged. The joints of the ankles, knees, fingers, wrists and the right elbow were swollen and somewhat restricted in their motions. The enlargement at the ankle joint was peculiar, several of the tarsal bones sharing in it. She walked with difficulty, with knees and hips flexed. Flexion of the knees and unwillingness to walk had been observed immediately after an attack of cholera morbus in October, 1898. The knees were kept a little flexed, and there was a very slight effusion in these joints. The child did not sleep well, but otherwise seemed to be in good health. Potassium iodide, gr. iv-viii, had been given t. i. d. for a month without improvement. The teeth were not notched. There was no syphilitic history. It was not typical scurvy. The child had been for three months on a general diet, including eggs, meat, potatoes and fruit. It was certainly not a typical case of rickets. She had cut teeth early and walked at ten months, the head was well formed and the abdomen not prominent. The diagnosis remained uncertain.

Dr. Ketch said that the obvious feature of the case was a very exaggerated change in nutrition—an overgrowth of some kind, the effect of some not so obvious diathetic cause. He had seen localized changes in scorbutus which were very similar.

Dr. V. P. Gibney said that the changes were similar to those seen in chronic rheumatoid arthritis, which he had repeatedly seen in typical forms in children

seven and eight years of age, and he did not see why it should not attack a child sixteen months old. This, however, would not explain the growth of the long bones and phalanges. His first thought was of scorbutus, but the condition would have disappeared with the child on the diet stated. Syphilis could be excluded. If pushed for an opinion he would say it was a case of multiple bone tuberculosis, a condition which could be less easily excluded than any of the others mentioned. The boggy feeling of the joints, the fact that there was effusion in the joints, and the statement that flexion of the knees and an unwillingness to walk had followed an attack of cholera infantum all supported the view that it was an instance of bone tuberculosis. He would raise the question whether synovitis was not one of the earliest signs of tuberculosis in a child. He advised putting the child in a wire cuirass and keeping the limbs extended. It was not good to allow the child to walk.

Dr. Ketch said that primary synovial tuberculosis was rare in children.

Dr. Judson had noticed the contraction of the knees and hips, but thought it was not the result of the reflex muscular action of joint disease, and that the fact that the contractions were nearly symmetrical pointed to a more general cause than tuberculosis of the joints affected. He did not think that synovitis was an early incident of osteitis, and that primary synovitis could be differentiated by the absence of the usual signs of osteitis, which were muscular atrophy and reflex action and a prolonged history of inconstant lameness and pain. Synovitis should not be considered as liable to run into osteitis, although practically it was well to relieve a synovitic joint from weight-bearing.

Dr. Ketch said that he had rarely seen synovitis as an early stage of tuberculosis.

Dr. V. P. Gibney said that the focus of diseased bone might suffer a traumatism and thus cause an extension of the process and give rise to this outward manifestation. He recalled a case seen twenty years ago. The child's knee was full of fluid. It was thought surely to be syno-

vitis, and a glowing prognosis of recovery in a few weeks was made, but after six or seven years' treatment recovery took place with a stiff knee. Primary osteitis, with secondary synovial distension, occurred before the gross signs of the osteitis, which called the attention of the practitioner to some trouble in the knee. At this stage the trouble could be cured.

Dr. Elliott said that fluid in a joint immediately after a traumatism pointed clearly to a synovitis directly due to traumatism. If tuberculosis followed it resulted from a further injury to the bone itself, which made a proper nidus for the tubercular growth. In other words, a dual injury and the fluid in the joint was entirely distinct from the true tubercular lesion and in no way connected with it. The later tubercular development might delay the absorption of the primary synovial excess, and thus the latter might come to complicate the tubercular joint.

Dr. Myers had seen effusion early in tubercular joint disease, but did not consider it of diagnostic value. In spite of the fact that the patient had had apparently an anti-scorbutic and anti-rachitic diet he could not help thinking that the trouble was due to one of these diseases rather than to tuberculosis. The child was not very sick. The principal changes were in the epiphyses and phalanges, and seemed to him to be due to some form of nutritional disease. The congested epiphyses could only account for the pain and tenderness, but he would adopt the suggestion made and protect the joints by keeping the child quiet.

CASES OF COXA VARA.

Dr. Myers also presented a boy, eight years of age, who had waddled and was walking worse every year since he began to walk. His muscles were strong. A certain rigidity of all the muscles of the lower extremities made examination somewhat difficult. The motions of the hip joints, especially flexion and abduction, were somewhat limited. There was no dislocation, but the neck of the femur was seen in the skiagram to be bent down as in coxa vara. The diet had been good. The boy was a little bow-legged and flat-footed.

Dr. H. Gibney found no shortening and trochanters, but slightly above the line. He thought the waddling might be due to flat feet.

Dr. V. P. Gibney said that the radiograph showed forward rotation and a little bending backwards of the femoral neck at its junction with the shaft. The opinion was expressed by several speakers that the boy had coxa vara in a mild and not strictly typical form.

Dr. Elliott thought that the condition dated from early rachitis in all probability. The picture was a logical one, and the femoral neck had changed simultaneously with the bowing of the legs, both having been more or less plastic.

Dr. Ketch said that the traces of rachitis were obvious. Coxa vara was sometimes made to include cases that were not dependent on bending of the bone. Some cases were due to deviations caused by abnormal epiphyseal growth resulting in a change in the angle of the neck of the femur. On the other hand, the peculiar gait of coxa vara was not infrequently attributed to knock-knees or bow-legs.

Dr. Judson said that coxa vara might be considered to mean an abnormal or various relation of the neck of the shaft caused by lesions of different kinds, all of which were not yet recognized.

Dr. V. P. Gibney said that in coxa vara we had found one new disease or condition to rule out in our study of hip disease. Many cases of "hip disease" in adolescents which recover and have relapses, but never get very bad, having from one-half to three-quarters-inch shortening, were really cases of coxa vara.

Dr. Ketch presented a boy, eleven years of age, who had had a limp (left leg) in winter, but not in summer, for three years. Pain and inability to walk on rising disappeared entirely in the afternoon. There had been no history of rickets or rheumatism. Abduction was limited, especially in flexion. Outward rotation abnormally free; trochanter one-half inch above the line; no atrophy; right, 28; left, 27½. The skiagraph showed a change in the angle of the neck.

TREATMENT OF COXA VARA.

Dr. Judson suggested mechanical means for permitting locomotion while

the affected part is relieved from the weight of the body as long as the bone was in a growing or plastic state.

Dr. V. P. Gibney said that when the affection was single good results could be obtained from the use of the hip splint. He saw no objection to the wearing of a jointed splint for some months, affording, not absolute, but modified protection, enough to shut out traumatism.

Dr. H. Gibney said that the ischiatic crutch for this purpose was easily adjusted and comfortably worn and allowed the limb to hang free.

Dr. Myers said that when both femora were affected mechanical protection was attended with difficulties, and it was not easy to keep the adolescent patient, like the one he had presented, quiet.

Dr. Judson suggested the use of a bicycle.

Dr. Ketch said that such a case would improve the general nutrition and prepare the parents for a long wait.

PAIN RELIEVED BY TRACTION.

Dr. Myers related the history of a patient, twenty-six years of age, who had suffered five and one-half years from rheumatism in the ankles, neck, shoulders, elbows and wrists and the right hip. For the first year improvement had followed massage and medical treatment. For the past four and one-half years the right hip had gradually become stiff and painful in walking. When first seen by *Dr. Myers* in February, 1898, there was some spasm, but no shortening. Motion of hip: Flexion 16°, abduction 10°, external rotation 10°. A short traction hip-splint was at once applied and is still worn. There had been no pain since June, 1898, and the man considered himself greatly improved.

Dr. Ketch recalled the case of a man in whom the terrific pain of a sarcoma of the femur had not been relieved by powerful narcotics, but had been relieved for a time by traction made with a long hip-splint and afterwards, as more convenient, with a short splint.

FRACTURE OF NECK OF FEMUR IN AN INFANT.

Dr. Myers showed a specimen of fracture of the neck of the femur in a child eight months old. A large amount of

callus was present within and without the periosteum. There was a lateral displacement of the lower fragment inward one-third the diameter of the bone. There was no change in the length of the bone. No history could be obtained except that the injury must have occurred before the fifth month.

A NEW PELVIC REST.

Dr. Myers also showed a pelvic rest, especially well suited for the application of spica bandages which included the trunk and thighs, as it could remain in place until the spica was fully applied and could then be easily withdrawn. It was made of a piece of sheet steel $\frac{1}{4} \times 1\frac{1}{2} \times 14$ inches, bent upon itself so as to form three sides of a square. The ends were hammered out so as to form oblong planes about three inches broad and five inches long. When in use one of the planes rested upon the table and the other supported the sacrum, while the upright connecting them was directed towards the feet.

Correspondence.

ALLEGANY COUNTY MEDICAL SOCIETY.

CUMBERLAND, MD., April 1, 1899.

Editor Maryland Medical Journal:

DEAR SIR—We had a very pleasant meeting of our county society on Thursday of last week, which was well attended. Drs. Tiffany and Osler were present and spoke in behalf of the State Society, urging our physicians to attend the centennial meeting and become members of the Faculty. Dr. Tiffany spoke on "Actinomycosis," and exhibited photographs of cases. Dr. Osler's talk was on the "Home Treatment of Pulmonary Tuberculosis."

Considerable interest was taken, and there will be a number of members attend from Allegany county.

Dr. Osler spoke of getting portraits of the founders of the Faculty. Dr. George Lynn, formerly of Cumberland, was one of the organizers. His portrait is now owned, I am told, by Mrs. Jennie Jones, the matron of the Home of the Incurables in Baltimore. She would no doubt lend it for the exhibit.

I have Dr. Lynn's library, consisting of a number of old works. They were given me several years ago by a friend.

I hope to be able to attend the State meeting.

Yours sincerely,

E. T. DUKE.

Medical Progress.

SUBCUTANEOUS GELATINE SOLUTION INJECTIONS IN ANEURISM.—Aneurism is usually recognized so late that operative procedures are not practicable. Many have been the attempts made to cure that usually fatal affection. Dr. Harold N. Moyer in Medicine brings up again the subcutaneous injections of solution of gelatin after the method of Lanceraux, which is to dissolve four to five grammes of gelatin in 200 cubic centimeters of a 7 per cent. chloride of sodium solution, previously sterilized. The solution is kept for several days at a temperature of 100° F. Those which become cloudy or those which do not harden when cool are rejected. From his own experience and a review of the literature he thinks the following conclusions are justifiable:

1. Gelatin solutions are of some value in the treatment of sacular aneurisms.
2. They are of no value in diffuse enlargements of a vessel.
3. The remedy is used empirically, the experimental work affording little or no basis for the treatment.
4. Solutions not stronger than 1 per cent. should be used.
5. Great care should be exercised in technique; failures in asepsis are easily made, as the solution is a good culture medium. The solutions should be kept in a brood oven to determine bacterial growth.
6. There may be dangers in the treatment, but the observations heretofore made are insufficient to indicate what they are.
7. Absolute rest in bed should be enjoined, and other remedies suitable for these cases may be given at the same time.
8. It is not a cure for aneurism, but may rank in the future as a treatment.
9. The method is worthy of more extended trial.

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MARYLAND MEDICAL JOURNAL,
Fidelity Building, Charles and Lexington Streets,
BALTIMORE, MD.

WASHINGTON OFFICE:
Washington Loan and Trust Company Building.

BALTIMORE, APRIL 8, 1899.

EVERY profession has its petty annoyances, but probably the medical profession, above all others, from the mysteries attached to the human body, is more subjected to foolish and silly questions. A physician may spend the day and, indeed, much of the twenty-four hours in seeing cases, and, as a recreation, he may drop in socially to see a friend or attend a dinner or some other social attraction, and at once his neighbors begin to talk about the "wonderful human frame" and such things, and then some brilliant member of the company will ask, "Doctor, is there much sickness in the city?" as if the poor physician was a collector of statistics or knew just what the condition of the city was. Another person will call across the table or room, "Doctor, do you think I ought to be vaccinated?" and probably some especially scintillating member will say that she does not believe in vaccination, which, of course, settles matters at once.

The wise physician will keep quiet at such remarks and not let himself into a wild discussion which can lead to nothing between persons of unequal mental attainments. There is a temptation always to talk "shop," especially by those not in the "shop." The lawyer is

asked his opinion in the parlor; the physician is consulted on the street corner. Such advice is worth usually just what it costs the person asking it, namely, nothing.

No man should be called on to give an opinion for no remuneration when such an opinion may have cost not only time and money, but when it may, in a measure, involve the reputation of the person giving it. Children are not the only ones that ask silly questions, and the public too often, in a vague desire to have a smattering of many things, asks questions the answers of which would fill folios. The younger physician is often too ready to bring up his profession, and that may be why the public thinks that such a topic should be pursued without ceasing.

If the public is to be instructed at all it should certainly be taught not to force any man to "talk shop" morning, noon and night.

* * *

THE plans for the centennial meeting of the Faculty are rapidly approaching completion.

The speakers are all expected to be present at the time indicated. Those in charge of the loan and other exhibits report great success in obtaining rare and valuable paintings and relics, and the book and drug exhibit will undoubtedly be well worth studying.

The delegates to the various counties return with most flattering reports of their warm reception, and in almost every instance the county physicians came together and formed a local society and promised to attend the meeting in Baltimore at the end of this month, and probably almost all of these will be enrolled as permanent members of the Faculty.

Next week the full programme will be printed, giving not only the speakers, as was done before, but also a list of the clinics and demonstrations in each college and hospital. Not only are physicians from all over the State of Maryland, but those from contiguous States are expected, and for a time Baltimore will contain a large number of physicians. Arrangements have been made with the railroads and hotels, and it is expected that all visitors will have every facility of transportation and of hotel comforts that they desire, and those who do not care to stay at the hotels will find smaller houses and boarding places most convenient and comfortable.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending April 1, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	6	1
La Grippe.....	..	3
Pneumonia.....	..	22
Phthisis Pulmonalis.....	2	38
Measles.....	5	..
Whooping Cough.....	..	..
Pseudo-Membranous Croup and Diphtheria. }	14	8
Mumps.....	..	..
Scarlet Fever.....	10	1
Varioloid.....	..	..
Varicella.....	5	..
Typhoid Fever.....	..	..

Baltimore county will pay for each vaccination at the rate of fifty cents.

Dr. A. S. Stone, a prominent physician of Monogah, W. Va., died suddenly last week, aged 39.

There being no fear of a Spanish war this summer, a great many physicians will cross the ocean. Last year their plans to cross failed.

Judging from the number of obituaries of local physicians printed in the Canadian medical journals, there must be several good vacancies in Canada.

As a result of the Adams poisoning case, it is said that the Kutnow powders' firm has failed because the sales of their powders were so affected by this murder.

Seventeen candidates received their degrees at the Baltimore Medical College. The small number is due to the interval in the change from a three-year to a four-year course.

Under the will of the late Miss Melissa Baker of Baltimore the Nursery and Child's Hospital will get \$600, and under certain specified conditions the Hospital for Consumptives of Maryland will receive \$1250.

The smallpox report up to March 31 is as follows: Washington, 58 cases; Baltimore, 4 (there are between 20 and 30 at the Quarantine Hospital); Cumberland, 3; Pocomoke, 3; Alexandria, 300; Newport News, 576; Norfolk, 595, and Portsmouth, 171.

Dr. Leon L. Solomon, chairman of the section on materia medica, pharmacy and therapeutics of the American Medical Association, urges those intending to read papers to send him the titles as soon as possible. His address is 323 West Walnut Street, Louisville.

If other States follow the example of Iowa and revoke licenses of unworthy physicians, the bad ones of the profession will soon be weeded out. The Supreme Court there has decided that the State Board of Medical Examiners has the right to revoke licenses.

The American Public Health Association has issued its preliminary programme, in which it may be seen that the association will hold its twenty-seventh annual meeting at Minneapolis on October 31 and November 1, 2 and 3 of this year. Dr. George H. Rohé was the president.

The American Gastro-Enterological Association will hold its second annual meeting at the Shoreham, in Washington, May 2, immediately after the meeting of the Association of American Physicians. An attractive programme is presented. Dr. John C. Hemmeter, who is the second vice-president of the association, will read a paper on "Fate of the Digestive Ferment."

As a result of the Faculty centennial it is hoped to raise a fund to put up a building suitable for the Faculty and its growing library. It is noted that the College of Physicians of Philadelphia is endeavoring to raise a permanent endowment fund of \$50,000, and Dr. W. W. Keen, who is to address the Faculty in Baltimore at its centennial meeting, is chairman of that committee in Philadelphia.

After due deliberation and a visit to the field, Dr. John Whitridge Williams has decided not to accept the very flattering offer made to him by the Rush Medical College of Chicago. As is known, the Rush Medical College is a part of the University of Chicago, and a position in that medical school means a professorship in the University of Chicago, one of the foremost institutions of learning in this country. This meant not only a great honor to Dr. Williams, but also made him sure of a large remuneration, and in a city of the size and wealth of Chicago an enormous income was in prospect. It is likely that the Johns Hopkins University will show some solid appreciation of Dr. Williams' decision to remain.

Washington Notes.

Acting Assistant Surgeon Henry C. Carter, Jr., now at Jackson Barracks, La., has been ordered to Seattle, Wash., for duty with Captain Glenn's exploring expedition to Alaska.

Captain W. F. Robinson, assistant quartermaster, has purchased 60,000 pounds of galvanized corrugated iron roofing and 400,000 feet of lumber to be used in erecting hospitals in Manila.

The deaths in the District for the week were 108, of which ten were from cerebro-spinal meningitis, ten from apoplexy, two from typhoid fever and three from la grippe. At the end of the week there were sixteen cases of smallpox in the hospital, thirty-seven cases of diphtheria, seventy-five cases of scarlet fever in isolation.

The following physicians were elected to membership in the Medical Society D. C. Wednesday evening, April 5: Charles E. Ferguson, E. W. Fowler, B. L. Hardin, W. P. Malone, J. P. Miller, W. G. Morgan and J. B. Mullins. Dr. John D. Thomas read the essay of the evening, subject, "Some of the Complications of Typhoid Fever, With Report of Cases Seen in Soldiers During the Late War."

"Serum Therapy" was the subject of Dr. Shoup's paper read before the Washington Medical and Surgical Society Monday evening. Among the visitors who entered into the discussion were Dr. Llewellyn Eliot, who reported the result of his serum treatment in variola; Dr. W. P. C. Hazen reported forty-three cases of diphtheria successfully treated with the antitoxin; Drs. L. K. Beatty and D. Olin Leech reported some interesting cases.

At the regular meeting of the Medical Association of the District of Columbia, April 4, 1899, the following officers were elected for the ensuing year: President, D. W. Prentiss; vice-presidents, Drs. T. N. McLaughlin and E. A. Balloch; secretary, Dr. J. R. Wellington; treasurer, Dr. Frank Leech; the standing committee, Drs. Holden, Acker, Carr, Johnson, Leech, Mayfield, McLain, Ober and Stone; censors, Drs. Woodward, Cook and Glazebrook. Thirty-nine members were elected delegates to the Columbus meeting of the American Medical Association. There were eleven physicians elected to membership in the District association.

Book Reviews.

HISTOLOGY, NORMAL AND MORBID. By Edward K. Dunham, M.D., Professor of General Pathology, Bacteriology and Hygiene in the University and Bellevue Hospital Medical College, New York. In one very handsome octavo volume of 448 pages, with 363 illustrations. Cloth, \$3.25 net. Philadelphia and New York: Lea Bros. & Co.

It is rather a novel idea to find normal and morbid histology dealt with in a single volume, especially when that volume consists of less than 500 pages of printed matter. One might feel *a priori* rather skeptical as to the value of such an attempt. His skepticism, however, rapidly vanishes when the present book is examined. Dr. Dunham has presented us with a fresh and interesting description of the main points concerning the histology of the tissues and of general morbid processes. An air of originality which is exhilarating invades the whole. The literary style is unusually good, and in marked contrast with too many of our American medical publications. The author has throughout devoted especial attention to the physiological bearings of the histological structures, a point of view too often entirely overlooked by the morphologist. We wish to congratulate the author especially on his choice of illustrations. Instead of the hackneyed cuts which we see in all the text-books we are presented in this volume with a whole series of new and fresh illustrations; nor are these taken largely from preparations and drawings by the author himself; on the contrary, they have been drawn from recent articles in the bibliography. It stands to reason that the illustrations accompanying original research in the various departments of histology and pathology are likely to be the best possible illustrations available. Unless one has an immense amount of histological and pathological material of his own and is supplied with artists unlimited, it is almost impossible for one man to illustrate adequately the entire subject of either histology or pathology. It would be much better if writers of other text-books would follow Dr. Dunham's example, and choose the illustrations used from the articles of original investigators in the various special journals. We speak a distinct success for Dr. Dunham's effort.

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Original Articles.

ABORTION.

By John M. Bertolet, M.D.,

Member of the Berks County Medical Society, the Pennsylvania State Medical Association, the American Medical Association and the Reading Medical Association, Reading, Pa.

READ BEFORE THE BERKS COUNTY MEDICAL SOCIETY.

ABORTION is, according to the various authorities, "the expulsion of the product of conception before the fetus is viable." Miscarriage is usually applied to an abortion after three months. That abortions are becoming more numerous every day must be apparent to every practicing physician. Their causes are so varied that it is really amusing and at the same time very provoking to the attending physician. This peculiar state of affairs seems to multiply during housecleaning time, one woman claiming she was hanging curtains, another lifting heavily, while others have numerous and plausible excuses for their condition.

The methods which many women employ themselves have often been a wonder to me that they survived the operation, some using hatpins, some crochet-needles, lead pencils, pointed pieces of wood, and a case to which I was called recently, the woman had inserted the nozzle of a Davidson's syringe and flushed her womb with a quantity of hot water, and in this way got rid of a three months' pregnancy. When I saw the case she was in a pretty bad condition, having a temperature of 104° F. and a weak and rapid pulse, with profuse hemorrhage.

These abortions are not always self-inflicted; old women and others having

frequently a hand in the matter, and fight the cases along until finally a physician is sent for to carry the case through.

There are also certain physicians in our city, I am told, who make a specialty of the dastardly work or business of committing abortions for a consideration, and seem to thrive in their illegitimate practice. How these things can be carried on without being noticed is deplorable. It is bad enough if the act must be committed in order to save the life of the mother, but when carried on exclusively for monetary reasons, it should be condemned in the strongest language. It is unfortunate, however, that physicians are often misled by shrewd women to pass instruments in diagnosing womb troubles and denying in the most strenuous terms that they are pregnant; of course, they well know when once a sound has been passed that an abortion is inevitable.

I once attended a lecture given in the University of Pennsylvania by the late Dr. Goodell, in which he gave his experiences in this manner: A patient, covered with a white sheet, was brought before the class, and when Professor Goodell had concluded some remarks upon the subject he had the woman placed in position for examination. While this was going on Dr. Goodell happened to look under the sheet and at once recognized the patient as having been before the clinic about a year before. He simply made a digital examination and ordered the woman's withdrawal. After she was taken out, he said that this same woman fooled him once, but this time he was going to fool her. He said it was simply impossible to tell a pregnancy in its early stages, and that this woman had been shrewd enough to know this, and he having passed a sound for diagnostic pur-

poses, she aborted in a few days. He concluded that this woman was there for the same purpose the second time.

Professor Goodell took occasion then to tell the students that they could not be too careful in making examinations and could be easily misled by shrewd women, who seem to be equal to the occasion.

Of course, in such cases the physician is placed in a very dangerous position. It would be a good idea for every physician, especially those who make a specialty of diseases of women, to employ trained nurses in their offices, and have them hear the conversation and see the patient's treatment, in order to protect themselves. There is constantly a set of women who are bent on making trouble for the doctor, and, if they can, fleece him out of money and ruin his reputation and practice. The case against one of Philadelphia's most prominent physicians some years ago, in which he was fleeced out of \$15,000, is a fair example of what may happen. The rights of women in such matters is entirely too one-sided and offers too much protection in one direction only.

This is, of course, a little digression from our subject, but can be mentioned as a good point for all to observe.

Now, as to the matter of treating these abortions. I have not the least doubt but that nine-tenths of the ovarian diseases in our day are due to abortions, many of which have been improperly treated.

Before treatment, however, we may mention some of the causes of abortion outside of those mentioned above as due to chronic endometritis and metritis, cellulitis, disease of the tubes or ovaries, lacerated cervix and especially syphilis.

The treatment of threatened abortion should be by perfect quiet and rest and such drugs that will diminish nervousness and weaken muscular contraction. The latter seems to be controlled best by opium, bromide of potassium and chloral. Opium must, however, be given in large doses, as women about to abort seem to display a tolerance for this drug. Given in suppositories is probably the best method of administration. Viburnum prunifolium seems to be a specific in some cases.

In inevitable abortion the best plan is to empty the uterus as quickly as possible, as delay is positively dangerous. The method of removing the contents of the uterus with the finger is, in my opinion, in many cases, impracticable, for the reason that it is too painful, and the finger is too short an instrument to accomplish this, especially in corpulent women, and without an anesthetic would frequently unnerve the patient. The best method is to dilate, when indicated, and extract the fetus or its remains. Hemorrhage must of course be controlled, as may be necessary, by packing, tamponing, etc., and the administration of ergot in drachm doses every four hours after the uterus has been emptied, and enjoining rest in bed for several days, and tonics such as quinine, iron and strychnia, Blaud's mass with extract of nux vomica are among the best. The bowels must be carefully watched that they are at all times free.

The treatment of cases in which an abortion has been prolonged, and in such cases in which the advice of a physician is invoked, is more radical. The treatment of some physicians is to wait, while life seems to be ebbing away by profuse hemorrhages and septicemia playing havoc. They make no examinations on account of the nauseating smell, which in such cases is certainly sickening. But why wait any longer and endanger the life of the patient and risk the irreparable damage likely to follow any degree of delay and procrastination?

The uterus and the condition of the patient is now such that not enough vitality is left for nature to perform the work of freeing them of the foreign and poisonous mass, and radical measures only are left to be invoked. As a prominent professor once said in lecturing to the class in surgery, "Nothing is too menial for a physician to do, provided he does not do it in a menial way," and I have often thought how true this expression is. I was told some time ago that a prominent doctor who was attending a lady, who knew she was suffering from some womb trouble, being asked if he did not think an examination should be made, replied that such things were so distasteful to him. This doctor was at once dismissed for his distastefulness.

Is it any wonder that our patients become disgusted with such treatment? We are here as benefactors to our race in a certain sense, and we should show our manliness in our profession and do what we can to relieve poor, suffering humanity.

This little digression will bring me to the final treatment of the latter cases. My plan is to at once dilate the uterus, if not already dilated, and with a douche curette begin emptying the uterine body of its offending contents, using a solution of one to eight thousand or ten thousand of bichloride of mercury. This usually lowers a temperature of 104° F. to nearly normal within a few hours. After curetting and flushing the intra-uterine cavity with a gallon of the above solution, pack the member thoroughly with an antiseptic gauze, cut about an inch in width. This is left to remain for about twenty-four hours, then it is removed and usually the result is all that can be desired. Delay in these cases I am sure is the cause, as I have already stated, of the majority of uterine troubles, and they can all be avoided by prompt action.

Historical Department.

Under direction of EUGENE F. CORDELL, M.D.,
Author of "Historical Sketch of University of Maryland" and Editor of "Centennial Volume" of Medical and Chirurgical Faculty.

I.

A DOCTOR'S LIFE IN THE BACKWOODS ONE HUNDRED YEARS AGO.

I HAVE recently met with an account of a young physician's experience on the border of Virginia 100 years ago, which is of especial interest at this time when we are about to celebrate an occasion that will recall in many ways the times which it describes.

In the month of February, 1799, a young doctor—since well known to fame—"of a strongly romantic disposition," but unaccustomed to the hardships of border life, embarked on the Monongahela river, at Pittsburg, for Wheeling, in search of a location where he might

try his future in the practice of his profession. The flat-bottomed boat in which he took passage was nothing more than a square box made of rough planks, fastened together with wooden pegs, and furnished with rude oars. About one-third of the deck was covered over, affording partial protection from frost and rain. Beside a considerable quantity of merchandise and half a dozen horses, there were several passengers on board, including two clergymen and a woman. The craft was without sails, being carried along solely by the natural current, "floating majestically," so it is said, down stream. Yet it was fully equal in construction and capacity to any vessels at that time upon those waters, steamboats being as yet unknown.

Scarcely had the junction of the rivers been reached and the Ohio entered when the passengers were informed that, owing to the shallowness of the stream, there would probably be difficulty in passing the "riffles" or falls below. In fact, when this point was reached the boat grounded several times. At each lodgment it became necessary to lighten the weight, and all hands were required to jump out and push the vessel over the obstruction into deeper water. When the boat began to move again each one had to look out for himself and climb up over the side on to the deck. To those unaccustomed to such a predicament, as the young physician was, it can well be imagined that to be thus forced to leap repeatedly into the swift current of a wide river, with the water at times rising breast-high, and at a temperature near the freezing point, was by no means an agreeable experience.

Nor was it free from danger, for if one happened to lose his hold it was almost impossible for him to retain his footing and quite impossible to regain the boat, unmanageable as it was and being rapidly carried down stream. Added to this was the condition of the crew, who, in order to obviate the effects of the exposure, thought it essential to fortify themselves by copious draughts of whiskey. The clergymen were not excused on account of their cloth from sharing in the discomforts of the others. As the whiskey began to produce its legitimate effects, the

cry, "Out! Out!" was repeated with increasing energy. As they did not comply, presently murmurings were heard, accompanied with coarse jeers, for the rough boatmen had no respect for ministers of the Gospel, not one of whom probably they had in their whole lives heard preach. The next call was enforced by threats to throw them overboard if they did not at once obey. The younger of the two now began to realize that the matter was becoming serious, and accordingly meekly let himself down into the water, at the same time pleading for the exemption of his older companion. Fortunately, the captain added his influence, and the crew were thus appeased with a partial sacrifice to their wishes; for, if their threat had been enforced, the gray-headed old man, who was short, timid and clumsy, would certainly have been drowned. Thus the doctor was kept busy all day in changing and drying his clothes. No provision had been made for feeding the passengers on this voyage, and each one was left to shift for himself, preparing his own coffee, etc., or doing without, as he preferred.

Night came on with profound darkness, when, a light being seen on shore, the captain moored the boat. The passengers now disembarked and ascended the bank, where they found a cabin and a welcome log fire. The inmates of the cabin consisted of a good-looking, rosy-cheeked and sprightly woman of about thirty years and her eight children; the husband was absent at the time on a hunting excursion. The woman readily consented to prepare supper for them, the materials being abundantly provided from the boat. While the meal was being prepared the doctor, whose youth and respectful deportment doubtless commended him to his buxom hostess, sought and obtained permission to lie down and rest himself on the one bed which the entire family possessed, and which stood in the corner of the solitary apartment. This bed was supported upon poles, one end of which rested on two forked stakes buried in the ground, the other running through the wall. Pieces of splint timber were laid on the poles and the sides were boxed in with the same. The in-

closure was filled with oak leaves, and over these were spread blankets.

In due time the doctor was roused from his slumber to partake of the supper, which, though not at other times inviting, the previous fasting and exposure now rendered particularly grateful. The rest of the night was spent by the voyagers lying on the floor with their feet to the fire.

The next morning, having partaken of an early breakfast and liberally repaid their forest hostess with several days' supply of provisions, they resumed their journey. She came down to the shore to bid them good-bye. Although the ground was covered with snow, she was both bareheaded and barefooted; yet she was smiling and seemed as light-hearted and happy as though she had everything her heart could wish.

The doctor gives an interesting account of his new home and its surroundings, and of some of his professional experience there, which will constitute the theme of my next article.

Society Reports.

CLINICAL SOCIETY OF MARYLAND.

MEETING HELD FRIDAY, APRIL 7, 1899.

THE meeting was called to order by the president, Dr. Lord.

Dr. Wm. H. Welch reviewed "Recent Contributions to the Theories of Immunity."

He said there had been no subject of so great interest to bacteriologists as the study of immunity, and, indeed, none of greater interest in medicine in general. The theories of immunity have more than theoretical interest, because the deductions which have proven to be of such great practical importance have come almost entirely from theories. One's theories as to the nature of a disease determine, to a great extent, one's method of practice, and even those who consider themselves eminently practical find that they are very much influenced by theories.

We understand by immunity the insusceptibility to infectious disease, and that immunity may be natural, pertaining to the race or the individuals of the race, or it may be acquired in different ways. It

may be acquired by having a natural attack of disease or by artificial methods. Physicians of earliest times were familiar with the fact that in certain diseases a single attack left behind an immunity which might be either transitory or lifelong in duration. It was not, however, until recent years, when it was found possible to produce immunity experimentally, that we had any idea as to the factors concerned in the true causation of immunity. One striking instance of experimental immunity is the immunity against smallpox by vaccination, the fundamental nature of which was not at all understood until Pasteur's discoveries in 1880. Since that time, with the discovery of specific germs of a large number of infectious diseases, it has been found possible to produce immunity from nearly all the pathogenic diseases by methods of vaccination. The immunity produced by inoculating the animal by virus is what is known as active immunity, which is brought about by the introduction of the germs of the disease or their products, and this discovery that it is possible to produce active immunity by the use of the chemical products without the use of the germs—a discovery made by Dr. Theobald Smith in his study of hog cholera—is one of fundamental importance, and the most interesting experiments are those which are produced by vaccination with chemical products of the micro-organisms. Induction of immunity of this sort is always attended by a certain amount of reaction, and it takes time for immunity to be brought about. The reaction usually takes place partly at the seat of vaccination and is partly constitutional, but it is questionable whether any substantial active immunity can be produced except by a certain amount of reaction. The reaction which attends the induction of cowpox is a good illustration, in which there is local reaction and a certain amount of constitutional disturbance.

Dr. Welch referred particularly to the presence in the blood of animals which have been rendered actively immune, of what are known as protective or healing substances. These healing or protective substances can be transferred to another

animal, another individual, and can produce also immunity, but the immunity brought about in this way is very different from the natural immunity, and is spoken of as passive immunity, the conception being that a protection of the immunitive substance generated by the first animal is transferred, and the individual receiving this does not have any marked reaction—usually no reaction at all—the immunity coming on at once or after a very short period, and it is only of very transitory duration. We have, then, the active and passive immunity, the latter being brought about by transferring to a healthy animal of some of the immunitive substance actively generated by vaccination in another animal, and is attended by no notable reaction, the degree of immunity lasting only a short time, whereas active immunity may last for months and even years. It has been found, however, that the basis of active immunity is not the same in all animals, and it has become clearer and clearer that every micro-organism is a problem by itself. Dr. Welch says bacteriologists have ceased to schematize in this matter, and believe that there is no single law under which the explanations of immunization can be brought.

We have, of course, the two kinds of immunitive substances, one which has the property of antagonizing the specific poisons produced by the organism producing the disease, and this is known as antitoxic immunity, and there is the immunitive substance which has the property of destroying the micro-organism concerned in the active immunity, and which is known as bactericidal immunity. The examples of the former are those produced from diphtheria, tetanus and snake venom; those of the latter from cholera and typhoid fever. We know of no antitoxic immunity from cholera or typhoid fever—only a bactericidal.

Dr. Welch said it was interesting to note that if one used a very strong toxine, introducing it into a susceptible animal, using small doses at first and gradually increasing the dose, it would be possible in the course of time to produce a very high degree of antitoxic immunity, and if it were possible to secure strong toxines

from the cholera, typhoid or tubercle bacillus there is no question that it would be possible to produce a high degree of antitoxic immunity. He says Metchnikoff is not at all satisfied with the view that cholera bacillus does not produce a strong toxine, although it cannot be demonstrated as yet.

Dr. Welch referred particularly to the different views held as to the origin of the antitoxine, about which there have been two very distinct opinions, namely, those of Buchner and Behring. The former believes that the antitoxine is in some way or other derived from the toxine, and in that way derived from the bacillus itself, that it is a transformation or chemical change of the toxine itself, while the view of Behring is that the antitoxine is not derived from the toxine, but that it is something produced in the body, presumably by the cells of the body through a reaction which is set up by the action of the toxine. These two theories, he says, set over against each other for a long time without any conclusive evidence in support of either until about a year ago, when Ehrlich's views on the subject became known. Ehrlich believes that the susceptibility of the toxine depends upon the presence of a substance in the cells of the body which have affinity for the toxine. The toxine is unlike most poisons with which we are familiar; it does not belong to active poisons, but has a special affinity for the protoplasm of certain cells of the body. This is demonstrated in the case of tetanus toxine, where it is found that the protoplasm of the nerve cells has a chemical affinity for the tetanus toxine. Those animals not susceptible to the toxine, Ehrlich thinks, have nerve cells the protoplasm of which is of a different quality in that respect, and he supposes that in the protoplasm there are different sets of molecules—"side chains"—and that it is among the so-called "side chains" in the molecule that we are to search for those having definite affinity for the toxine, and he calls this group the "toxiphoric" group. Ehrlich, then, has come to this conclusion, that the antitoxine is nothing more than a normal constituent of the nerve cell, which has the power of binding toxine, and that

antitoxine is something, therefore, that exists normally in the nerve cells which can be accumulated and set free in the blood.

Referring to the bactericidal immunity Dr. Welch said this was discovered by Pfeiffer in his experiments, and is a very extraordinary kind of immunity, but has nothing whatever to do with antitoxic immunity. One can render immune from cholera a guinea-pig with the living or dead cholera bacilli, giving first small doses, then gradually increasing the dose. If you mix the blood serum of the animal in a test tube with the living culture of the cholera bacillus no change takes place except agglutination. If, however, you introduce the living cholera culture into the peritoneal cavity of the guinea-pig that has so been vaccinated a phenomenon at once takes place, and this is usually called the Pfeiffer phenomenon. The cholera bacilli lose their motility, tend to clumpt together and quickly break up into granules, being no longer recognizable as bacilli and totally disappear; these are then spoken of as solution of the cholera bacilli, and we have no antiseptic as powerful as this solution. This phenomenon is also spoken of as lyso-genic phenomenon, and the substance producing it as lysin. Pfeiffer's conception is that the particular substance exists in a negative state in the blood, and that it can be rendered active by a combination of negative serum with some fresh serum. Ehrlich applies his theory to this also, but it is a little more difficult to understand. The main point, however, is that he supposes that the particular substance, the lysin, is produced in the cells of the body just as the antitoxine substances are produced.

Dr. Wm. Osler then spoke on "Cerebro-Spinal Meningitis."

He said that if one would take the mortality bills of any city he would find that the deaths from meningitis run singularly uniform. Thus, in this city in 1893 there were 256; in 1894, 276; in 1895, 257; in 1896, 286; in 1897, 273, or between 250 and 280; last year, 1898, there were 335, and there appear in the mortality bills the words "Cerebral Meningitis." In 1895, 1894 and 1893 there was a very limited

number diagnosed as cerebro-spinal meningitis; six cases in 1893, twenty-six in 1894 and twenty-seven in 1895, and last year there were sixty-seven with the diagnosis of cerebro-spinal meningitis. He says that in the Johns Hopkins Hospital their cases have practically been those of tuberculous meningitis, three in which the pneumococcus has been associated, and a certain number of streptococcus and staphylococcus, but, with one exception, they had no cases due to cerebro-spinal fever until last spring, just a year ago; since that time they have had sixteen cases in all in which the diagnosis of cerebro-spinal fever has been made.

Dr. Osler referred to the outbreak of the disease in Boston during the last two years, not extensive, but a few cases coming on now and then, in all 350 to 400 cases in the two years. The newspaper reports state that there have also been outbreaks in parts of British Columbia and in Oregon, in Kentucky, Virginia and other parts of the South and recently in Philadelphia, and we have certainly had the disease here in very light outbreak, but sufficient to swell very considerably the number of deaths from meningitis.

He said he wished particularly to refer to the diagnosis of the disease. In the first place the mode of onset is very different, indeed, from that of tuberculous meningitis; it does not differ essentially from the onset of pneumococcus meningitis. The person may be in good health until taken with a chill or has a sudden attack of vomiting; often the patient is seized with a severe chill while at work. There are certain features in the course of the disease, while not peculiar to the cerebro-spinal fever, occur much more frequently in it than in other forms of the disease; there is a very much greater degree of rigidity of the neck muscles, and there may be very marked opisthotonus, and the degree of rigidity of the spinal muscles and the intensity of the spinal symptoms are very much greater than we usually see in tuberculous meningitis. Features which are rarely met with in the more common attacks of meningitis are arthritis and the skin lesions; in one case the arthritis was among the first symp-

toms of the disease. A very interesting feature, which is more striking in cerebro-spinal fever, is a very important point in diagnosis, and that is the retention of consciousness, even when other symptoms are very severe. Dr. Osler referred to two cases, one in the fourth and one in the fifth week of the disease, where both retained consciousness, both recognized their friends, and at the corresponding period of the disease in tuberculous meningitis they would certainly have been in a condition of profound coma. Then, most important of all, is the difference in the prognosis. Of the sixteen cases referred to there have been only six deaths. Had those sixteen been tuberculous meningitis they would all have died, pneumococcus the same, and, so far as we know, streptococcus and staphylococcus; in fact, meningitis associated with cerebro-spinal fever is the only form of meningitis from which recovery, one may say, occurs. Practically we see no cases of tuberculous meningitis recover, or pneumococcus meningitis, so that the ultimate recovery of a case which has present well-marked signs of cerebro-spinal meningitis is very much in favor of the presence of true cerebro-spinal fever.

One of the most interesting and important points in diagnosis was suggested some years ago by Professor Quincke in a paper which was published in 1891, in which he proposed that we should systematically, in suspected cases of meningitis, puncture between the laminae of the lumbar vertebrae to withdraw spinal fluid for examination, and that has turned out to be of great practical importance. It is a very simple procedure, perfectly harmless and very readily carried out.

Dr. Osler says he thinks we should, as far as possible, be more specific in the diagnosis of these cases and in the returns to the Health Department. Now that we have the bacteriological department of the Board of Health we should be a little more ready to perform lumbar puncture, which is simple and harmless, and in certain instances of decided therapeutic value.

Dr. John Ruhräh read a paper on "Actinomycosis in America."

BERKS COUNTY (PA.) MEDICAL SOCIETY.

Dr. •JOHN H. BERTOLET read a paper entitled "Abortion" (see page 225).

Dr. James W. Keiser: Dr. Bertolet's paper is practical, and I think on the whole his conclusions are correct. His experience as to the cause of abortion is different from mine. In all my cases the only admitted cause has been a fall or heavy lifting. As a matter of course, the true cause in many of these cases was from me designedly concealed.

Where the abortion is inevitable the indications for treatment, I think, do not admit of much dispute. When the flooding is great I always resort to a tampon, and then the os speedily dilates and the placenta as a rule can be hooked out with the index finger. A short time ago I was called in consultation where the hemorrhage was alarming, and I was able almost instantly to hook out the placenta with my finger, perhaps because my finger was longer than that of the attending physician; the placenta being removed, the hemorrhage ceased. If the placenta cannot be removed with the finger without much effort, it is better to use the speculum and forceps, as this procedure is less painful to the woman.

In those cases where the discharges are offensive, there can be no question as to the importance of removing the placenta without any further delay. On account of the dangers of septicemia, it would be almost criminal to wait until it is discharged spontaneously. Only yesterday I was present at a case where a woman suffered severe pains and had occasional hemorrhages for ten days, and the discharges were very offensive. The attending physician opposed any instrumental interference, the consulting physician favored it, and I, throwing the weight of my influence on the side of the consultant, we overruled him. With very little difficulty the placenta was removed, and we both left, leaving the case to the attending physician. I have no doubt but that this case will speedily convalesce.

Dr. Henry Landis: When an abortion has become "inevitable," as evidenced by uncontrollable flooding, or by a putrid discharge, I produce gradual dilatation

by means of a sponge or sea-tangle tent, in preference to forcible dilatation by Goodell's dilator or other metallic instrument. The tent is to be supported *in situ* by a sterile and well-adjusted vaginal tampon. I believe that a gradual dilatation of the os is better adapted to incite the expulsive efforts of nature than the rapid and forcible dilatation under an anesthetic. The tent process has the advantage over the forcible of not appearing as formidable to the patient, of not incurring the risks of anesthesia and of not producing traumatism to the os and cervix. If the tent be well sterilized and renewed every six hours, there is no greater danger of septic infection from it than from the tampon, which latter is recommended by Dr. T. Gaillard Thomas as the sheet anchor during the first three or four days or expectant period of the treatment of an abortion. It is remarkable to what extent a sponge tent will dilate the os and cervix in three or four hours. And, again, if this gradual dilatation does not incite spontaneous expulsion, the vectis or curette can be used just as well then as after forcible dilatation. I here exhibit to you an instrument called a placental hook, which has served me well in those unavoidable cases where the ovum needed assistance in its expulsion. You will observe that it is a simple little steel instrument about eight inches in length, having a fenestrated scoop at each end, one scoop being a little larger than the other. This scoop being introduced into the uterus, and the instrument rotated, will effectually detach the placenta and greatly assist the operator in removing both it and the fetus.

Dr. M. LeRoy Wenger: I think Drs. Cleaver and Landis have not properly understood the reader of the paper. He does not advocate operative measures unless the case is one of inevitable miscarriage. He distinctly uses the word "inevitable." In this he certainly follows the latest and best method. The dangers accompanying miscarriage are twofold, the one from hemorrhage and the other from sepsis. When the ovum and its membranes are entirely removed as in curettage, the danger from hemorrhage is *nil*. When this is done there will also be removed the most usual cause of sepsis. Then why

should we hesitate to operate? As the reader says, "it is remarkable how the abnormal temperature will drop in septic cases after this procedure." I also agree with some of the gentlemen that the introduction of instruments into the uterus does not always produce an abortion. I recall a case in my own practice where a hooked wire had been pulled into the uterine tissues and could only be removed after dilatation, and where abortion did not follow.

Dr. John M. Bertolet: In closing this paper, little remains to be said, but, replying to Dr. Israel Cleaver, I would say that much trouble is caused by procrastination, in cases in which the womb is slow in casting off the products of conception, which have become purulent. There are now two cases in the Reading Hospital which were operated on for double pyosalpinx, both the result of miscarriages. In one of these cases the woman was confined to bed for several months, was under the care of several physicians, who did not even make an examination. The case drifted to me, and I at once recommended an operation as the only relief. The other case was not allowed to suffer so long; an operation confirmed the diagnosis of double pus tubes. The doctor claims to have had possibly fifty cases of abortion or miscarriages during his forty years' practice. I can safely say that I have had nearly as many during my short career, and my method is, in threatening abortion, to at once dilate and curette the womb in order to avert any septic infection, which is nearly always on a fair way by the time the doctor is sent for. I think it is perfect nonsense to wait until your patient is nigh exhausted, then try to save her life. "Do something," as a prominent physician once said, "as that is why the people send for the doctor." There is little danger of doing any damage by dilating and curetting, for the simple reason that nearly all the congested mucous membrane is in such a condition as to readily absorb septic material! There is not the least doubt but that these abortions are increasing, because women seem to book themselves in this particular direction, and many know better how to get rid of the prod-

ucts of conception than some physicians could, possibly, if they wanted to.

The use of sponge tents, as suggested by Dr. Landis, is a back number. They are condemned by every teacher of medicine in these days; they would only furnish more ground for infection. Dilating and curetting I consider absolutely safe when properly and thoroughly done. In my opinion, not half the number of ovarian diseases would happen if cases of miscarriages were properly treated.

Referring to Dr. Bachman, I did not touch on elongated cervix as a cause of abortion.

The cases to which I referred in my paper and discussed by Dr. Wenger are those of inevitable abortion only, and not in any case of threatened abortion. In the latter every means should be employed to avoid it.

Medical Progress.

REPORT OF PROGRESS IN GYNECOLOGY AND OBSTETRICS.

By George W. Dobbin, M.D.,

Assistant in Obstetrics, Johns Hopkins University.

THE LEUCOCYTOSIS OF LABOR AND THE PUERPERIUM.

HIBBARD and White (*Journal of Experimental Medicine*, Vol. III, pp. 639-646), after a brief review of the literature on this subject, publish the results of their investigations on the blood of women during labor and the puerperium. The examinations were made in the Boston Lying-in Hospital and the blood of fifty-five patients was examined with reference to the number and kind of white corpuscles present, the object being to determine the amount of leucocytosis present in normal labor and in the normal puerperium, the peculiarities due to the age of the patient and the beginning of lactation; also the effect of hemorrhage, prolonged labor, septicemia and inflammations of the breast in causing departures from the normal. The blood counts were made during the first stage of labor and also on the first, third, fifth, seventh, tenth

and thirteenth days after delivery, and any count above 10,000 per cubic millimeter considered a leucocytosis.

Taking the above as their standard the authors found that 84 per cent. of the primiparae and 75 per cent. of the multiparae examined possessed a distinct leucocytosis. The normal leucocytosis, which was obtained by taking the average of thirty-nine patients, in whom both the labor and the puerperium ran a perfectly normal course, was seen to be before delivery 16,100 for primiparae and 11,800 for multiparae. This number decreased rapidly after delivery and reached the normal on about the fourth or fifth day; it then rose slightly until the seventh day, when it again fell gradually to the normal. This general plan holds good for both primiparae and multiparae, except that in the latter case the leucocytosis is not so great. The slight increase in the number of leucocytes which follows the initial drop the authors are inclined to attribute to the disturbances in the breasts which take place at that time. As regards age, the younger women are found to possess a higher degree of leucocytosis than the older, and the counts made during the first stage of labor are higher when made just before the delivery of the child than when made earlier in the labor, bearing the relation 12,000 to 17,600.

The effect of hemorrhage is apparently to produce a higher leucocytosis than when the labor is normal, for the counts from five multiparae in whom there was quite severe hemorrhage showed an average increase of about 1500 above the normal average on the day following confinement, and two cases of severe postpartum hemorrhage showed a leucocytosis of 3000 or 4000 above the normal average for the first five days following delivery.

Inflammation of the breasts, with fever ranging around 102°, was noted in four cases, and in all of these cases there was a marked increase in the number of leucocytes just at the time of the febrile attack, which, however, disappeared immediately after it. It, therefore, seems that as the blood count is so strongly affected in the mild forms of mastitis it can be of little value as a diagnostic sign in the more se-

vere purulent forms. Three septic cases, all mild, were observed. This number, the authors state, is entirely too small to draw any definite conclusions from. In one case the leucocytosis ran a normal course and in the other two there was a marked increase.

Differential counts of the white corpuscles were made in nineteen cases, fifteen with rather high counts, when it was found that the leucocytosis consisted in a marked relative and absolute increase in the polynuclear cells, and in four cases with a normal leucocytosis the proportions of the different white corpuscles were practically normal. The conclusions they have drawn from these investigations are:

1. A leucocytosis was present in over three-fourths of the cases examined in labor, being more frequent and higher in primiparae.

2. During convalescence the count falls, rapidly at first; later more gradually to normal. About the seventh day there is a slight rise.

3. The leucocytosis is usually higher in younger women regardless of the number of the pregnancy.

4. Patients farthest advanced in labor have the highest counts.

5. Breast inflammation, even when mild, causes a prompt leucocytosis; hence the blood count is of no value in the early diagnosis of breast abscess.

6. The leucocytosis present at the time of labor is due to the increase in the polynuclear cells.

TETANUS PUERPERALIS.

Kühnau (*Berliner Klinische Wochenschrift*, 1898, Nos. 28, 29) reports, in so thorough a manner as to preclude all possible question of doubt, a case of puerperal tetanus in which infection took place through the endometrium, probably as the result of douching, during the puerperium.

He goes briefly into the various theories of infection with the bacillus tetanus, and shows that although the affection is by no means rare from the clinical standpoint, yet there are a very few cases in which the organism has been actually demonstrated by animal inoculations and cultures made from the autopsy.

There have been up to the present time only three positive instances reported—one by Chantemesse and Widal, who found tetanus bacilli in the tissues cut-retted post-mortem from a patient who had died with clinical symptoms of tetanus twelve days after labor; one by Heyse, who was able to demonstrate the organism both by animal inoculations and cultures in the lochial secretion of a patient dead of tetanus nine days after a forceps delivery, and was also able to demonstrate this same organism in the dust obtained from the cracks in the floor of her room; in the third case, reported by Stern, although the organism could not be cultivated from the tissues of the uterus, yet animals inoculated with portions of this material developed typical tetanus, and Stern concludes from this that a tetanus infection of the uterine cavity had existed, but that the organisms had died, leaving behind their toxine.

To these three cases Kühnau adds a fourth, which in abstract gives the following history: The patient, who had previously had twelve children, was delivered by a midwife a few days before admission to his clinic. She had not been examined during labor, but had been given douches for the first six days of the puerperium. She then began to have a foul-smelling lochial discharge, and two days later had symptoms of tetanus, which began with difficulty in swallowing. The case was clinically a typical one, being characterized by opisthotonos, toxic contractions of the muscles, risus sardonicus, etc., but there was wanting the usual reflex excitability. Although she was given intravenous infusions of the Behring-Knorr tetanus antitoxine, she died from a spasmodic closure of the glottis.

At the autopsy there was found an infection of the endometrium, presenting the typical picture of a puerperal thrombo-phlebitic endometritis. The toxine of tetanus was most intense in the endometrium, from which the tetanus bacillus, together with a number of other bacteria, could be isolated in pure culture. This organism could also be obtained from the blood and from the spleen.

Etiologically the case comes into the category of a mixed infection, with septic

and saprophytic organisms and the bacillus of tetanus, and the study of this last organism in the dust and in the cracks in the floor of her room, as well as in the straw mattress of her bedstead, makes the nature of the infection positive, the mode of entry of which, the author thinks, was by the douche.

MIXED PUERPERAL AND TYPHOID INFECTION.

Blumer (*American Journal of Obstetrics*, January, 1899,) reports a case of mixed puerperal and typhoid infection which is interesting from the fact that both the streptococcus and bacillus typhosus were found in the uterine cavity and heart's blood; and the extremely rapid fatal termination which these two organisms, working together, brought about.

His patient gives a perfectly negative past history, having passed through three normal confinements. The present labor was more protracted than the others, and she was attended during it by a midwife. Until the sixth day she had a perfectly normal puerperium, when on that day, after a very hearty meal, her family, noticing that she was breathing rapidly and was incoherent in her speech, called in Dr. Happel, the family physician. She was then delirious and semi-comatose, but could be aroused sufficiently to answer one or two questions and to recognize the doctor.

Pulse 120, temperature 100.8°, face Hippocratic, later becoming cyanotic; heart and lungs seemed normal; abdomen greatly distended, but nowhere tender on palpation; spleen dullness much increased. The uterus is as well involuted as is normal at this stage of the puerperium, and there is an eruption on the abdomen very suggestive of rose spots. From this condition she became rapidly worse and died the next afternoon, a little over forty-eight hours after the onset of the attack.

At the autopsy much gas was found in the subcutaneous tissue and peritoneal cavity, and all of the organs contain many gas bubbles (typical schaumorgane). The cavity of the uterus is lined by a smooth, deeply congested membrane, to which are adherent, here and there, pieces of brown-

ish pseudo-membrane, apparently decomposed blood clots. At the fundus on the right side there is a mass of adherent material over an area of seven by five centimeters in extent; it is of a reddish-brown color, the external portion being made up of clotted blood and the portion nearest the uterine wall of grayish-white material, either decolorized clot or placental tissue.

Intestine: The Peyer's patches and solitary follicles show absolutely no abnormality until a point twenty centimeters above the valve is reached; here there is a markedly swollen Peyer's patch containing one or two small areas of ulceration, capped by yellowish necrotic material.

Sections through the various organs show for the most part the changes due to a post-mortem invasion by the bacillus aerogenes capsulatus. Sections of the uterine wall when stained by Weigert show streptococci and bacilli morphologically similar to the bacillus aerogenes capsulatus, and where stained by the method of Flexner show bacteria similar to the bacillus typhosus.

The bacteriological findings were as follows: Blood, liver and spleen, bacillus typhosus and streptococcus; lung, streptococcus; mesenteric gland, bacillus typhosus; kidney, streptococcus and colon bacillus; uterine cavity, bacillus typhosus, streptococcus, colon bacillus and proteus vulgaris. Although the stained sections and findings at autopsy indicated, in addition to the above, an infection with the bacillus aerogenes capsulatus this organism could not be isolated on cultures.

The conclusions drawn by Blumer are that the extreme rapidity of the disease was due to the association of the two organisms, the streptococcus and bacillus typhosus. He says that there is a possibility of direct infection with both of these organisms by the midwife, but careful inquiry failed to reveal the history of any case of typhoid in the house before her confinement. The infection with the bacillus aerogenes capsulatus the author considers as entirely a post-mortem invasion and in no way connected with the fatal issue of the case.

CENTENNIAL MEETING, MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

McCOY HALL, JOHNS HOPKINS UNIVERSITY,
APRIL 25-28, 1899.

TUESDAY, APRIL 25.

- 8 P. M.—Address by Dr. S. C. Chew,
President of the Faculty.
9.30 P. M.—Reception by the Faculty.

WEDNESDAY, APRIL 26.

College of Physicians and Surgeons.

- 10 A. M.—Demonstration of the Pasteur
Methods in the Diagnosis and Treat-
ment of Rabies. Dr. Keirle. Dr.
Keirle will give this demonstration in
the Pathological Laboratory of the
Johns Hopkins Hospital.

Owing to alterations in the building of
the College of Physicians and Surgeons,
the Faculty regret that they will not be
able to hold any clinics or demonstra-
tions.

*Baltimore University,
21 North Bond Street.*

- 10 A. M.—Medical Clinic. Gastrodiaph-
any. Dr. C. Urban Smith.
11 A. M.—Surgical Clinic. Dr. Biedler.
12 M.—Gynecological Clinic. Dr. Sell-
man.
12 M.—Eye and Ear Clinic. Dr. T.
Cooke, Jr.

*Johns Hopkins Hospital,
Broadway.*

- 10 A. M.—Medical Clinic. Dr. Osler.
10.30 A. M.—The New Researches on
Malaria. Dr. Thayer.
11 A. M.—Surgical Clinic. Dr. Halsted.
11 A. M.—Pathological Demonstrations.
Dr. Welch.
12 M.—Gynecological Clinic. Dr. Kelly.
The Anatomical Laboratory and the
New Laboratories of Pharmacology and
Physiology will be open for inspection
under the direction of Drs. Mall, Abel and
Howell between 10 A. M. and 1 P. M.
1.30 P. M.—Luncheon at the Johns Hop-
kins University, provided by these In-
stitutions.

- 3 P. M.—Scientific Meeting, McCoy Hall. Papers by:
 Dr. Herman Knapp of New York, on Some Landmarks in the History of Ophthalmology.
 Dr. E. G. Janeway of New York, Clinical Observations on Some Forms of Heart Disease.
 Dr. George Ben Johnston of Richmond, How Far Myomectomy is to Supplant Hysterectomy.
 Dr. W. W. Johnston of Washington, J. Hughes Bennett; His Services to Medicine.
 Dr. Samuel Alexander of New York, The Management of Vesical Calculus in Prostatics.
 8 P. M.—McCoy Hall. Annual Oration by Prof. W. W. Keen of Philadelphia, on The Debt of the Public to the Profession.
 9.30 P. M.—Private Reception.

THURSDAY, APRIL 27.

*University of Maryland,
 Lombard and Greene Streets.*

- 10 A. M.—Cases Illustrating the Surgery of the Knee Joint. Dr. Tiffany.
 11 A. M.—Medical Clinic. Dr. I. E. Atkinson.
 11 A. M.—Abdominal Section. Dr. T. A. Ashby.
 12 M.—Electrical Illumination of the Stomach. Catheterization of the Ductus Communis Choledochus. Dr. J. C. Hemmeter.
 12 M.—Illustration of Methods Employed at the Municipal Bacteriological Laboratory. Dr. W. R. Stokes.

*Baltimore Medical College,
 Madison Street and Linden Avenue.*

- 10 A. M. to 11 A. M.—(a) Exhibition of Pathological Specimens and Slides in Projection Microscope.
 (b) Bacteria in Cultures and Under the Microscope. Dr. Potter.
 (c) Demonstrations in Clinical Laboratory, Showing New Method of Determining Hemoglobin and Indican. Dr. Whitney.

- 11 A. M. to 11.30 A. M.—(a) Case of Melancholia Treated from Indications Given in Clinical Laboratory. Dr. Hill.
 (b) Exhibitions of New Instruments in Nose and Throat Work. Dr. Merrick.
 11.30 A. M. to 1 P. M.—(a) Abdominal Section. Dr. Moseley.
 (b) Operation for Hemorrhoids. Dr. Earle.
 (c) Exhibition of a Successful Case of Extirpation of Bifid Uterus at Full Term, Saving Mother and Child. Dr. Blake.
 (d) Turning Off Carotids in Operations on the Head and Neck. Surgical Cases. Dr. Johnson.

*Woman's Medical College,
 1100 McCulloh Street.*

The College Buildings and Laboratories will be open for inspection at 10 A. M.

*Maryland Medical College of Baltimore,
 1114 West Baltimore Street.*

- 10 A. M.—Inspection of Laboratories and Demonstrations.
 11 A. M. to 12 M.—Neurological and General Medical Clinics. Drs. Hodgdon and Kintzing.
 12 M. to 1 P. M.—Surgical Clinic. Dr. Branham.
 1.30 P. M.—Luncheon at the Johns Hopkins University, provided by these Institutions.
 3 P. M.—Scientific Meeting, McCoy Hall. Papers by:
 Dr. A. Jacobi, European Medicine about 1799.
 Dr. E. H. Bradford of Boston, A Study of the Human Gait.
 Dr. H. C. Wood of Philadelphia, Nostisms, the Profession and the Law.
 Dr. Roswell Park of Buffalo, Cancer as a Parasitic Disease.
 Dr. J. C. Edgar of New York, Obstetric Teaching.
 7 P. M.—Annual Dinner of the Faculty.

*Hospital for Consumptives of Maryland,
 Park and Hoffman Streets.*

Open every day.

FRIDAY, APRIL 28.

Hospital for the Relief of Crippled and Deformed Children,

2000 North Charles Street.

10 A. M.—Demonstration of Orthopedic Cases and Methods of Treatment. Dr. R. T. Taylor.

12 M.—Visit to the Sheppard and Enoch Pratt Hospital at Towson. Luncheon from 1.30 to 3 P. M. Take York Road electric cars.

8 P. M.—Business Meeting.

The various Hospitals and other State Institutions in the vicinity of Baltimore will be thrown open for inspection at fixed hours, to be announced on the programme.

In the corridors of McCoy Hall and in the Donovan Room there will be a series of most interesting exhibits:

(a) Portraits of distinguished deceased physicians of Maryland.

(b) Diplomas and relics, etc.

(c) In the Donovan Room a literary and pictorial representation of the chief epochs in medicine.

(d) A collection of relics illustrating the text-books and literature of the year of the founding of the Faculty, 1799.

(e) A collection of the published works of the medical profession of Maryland.

(f) A collection of works illustrating the development of art in medicine.

The large drug houses and publishing firms have signified their intention of making important exhibits of pharmaceutical preparations and the recent published works.

GENERAL NOTICES.

The Registration Office will be found in the corridor of McCoy Hall. This office will be open on Tuesday afternoon at 4 o'clock, and on each succeeding day from 9 A. M.

Members are requested to register their names and addresses at once, and to pay their Annual Dues, and to ask for cards of invitation to the lunches, etc.

APPLICATIONS FOR MEMBERSHIP.

At the Registrar's desk will be found Applications for Membership, which may be signed by members of the profession

in the State and City in good standing, and upon payment of the initiation fee of Five Dollars the Examining Board will pass upon the Candidate, and he will be admitted to membership during the present session.

Visiting physicians from outside the City and State will, on registering, receive the invitations to the lunches, etc.

RAILROAD AND STEAMBOAT LINES.

Baltimore & Ohio Railroad, Pennsylvania, Delaware and Maryland.

Philadelphia & Reading Railroad, from Reading Terminal, Reading or Harrisburg.

Western Maryland Railroad.

Northern Central Railroad, Pennsylvania, Delaware and Maryland.

Baltimore, Chesapeake & Atlantic Railroad Co.

Weems' Steamboat Co.

Lehigh Valley Railroad, Pennsylvania, Delaware and Maryland.

Baltimore & Lehigh Railroad.

All the above-mentioned Railroads and Steamboat Lines will reduce fares to about one and one-third for round trip. Address Dr. J. D. Iglehart, 1214 Linden Avenue, Baltimore, Md.

BUREAU OF INFORMATION.

Members and visitors wishing information about any of the details of the programme or receptions and entertainments will apply at the Bureau of Information at the Registration Office.

ANNUAL DINNER OF THE FACULTY.

The Annual Dinner of the members of the Faculty will be held at the Hotel Rennert on Thursday evening at 7 o'clock. Tickets, \$5.00. Members wishing to subscribe must hand in their names at the Registration Office not later than 12 o'clock on Wednesday, after which hour no applications can be received.

Ladies of the families of members and guests are cordially invited to be present at the address of the President on Tuesday evening, and the reception following, and also at the address of Prof. W. W. Keen on Wednesday evening.

ADVANCES IN OUR KNOWLEDGE OF TYPHOID FEVER.—In the opening number of *Progressive Medicine* Dr. Wm. S. Thayer contributes an excellent monograph on typhoid fever. The *St. Paul Medical Journal* in noting this says: "With regard to prophylaxis of others during the treatment of a case of typhoid these noteworthy recommendations from a French source are given: 1. Isolate patients suffering from typhoid fever, or, at least, do not permit them to be treated in a room or ward containing young people who have not previously had typhoid. The warning contains some wholesome advice too often neglected, and sometimes with sad results, because we are persuaded that typhoid is not an air-borne disease, and forget that contiguity favors infection, because precautions will inevitably sometimes be neglected. 2. Nurses for typhoid cases should, if possible, be only such as have had typhoid themselves. In a family the young people should be removed. 3. The floor of the sick-room should be oiled, so as to be impermeable. Carpets and rugs should be removed, and the raising of dust should be avoided by frequent use of a cloth dampened with antiseptic solution. 4. The nurses should wear linen clothes, which they should remove when they leave the sick-room, and in general they should be warned to be circumspect in their relations with others, and especially careful of the utmost details of antiseptic in the matter of the preparation of food and drink for themselves and others.

* * *

A TONGUE DEPRESSOR FOR CHILDREN. In a recent number of *Pediatrics* Dr. H. D. Chapin, in presenting a new tongue depressor for use on children, stated that all practitioners had doubtless experienced difficulty in securing a good view of the fauces in infants. In such patients the tongue was high and the opening small, and apt to be obstructed by mucus, and the irritability of the stomach often led to regurgitation of milk. Everything depended upon getting a good view at the first attempt. To this end the attendant should hold the baby on the left arm before a window, and secure both of the child's arms firmly with her disen-

gaged arm. The physician should guide the head of the infant with his left hand, using the tongue depressor with his right. At night a candle was preferable to a gaslight, because of the greater ease with which the light could be directed just where it was wanted. The ordinary tongue depressors, as well as spoons, he said, did not properly grasp the base of the tongue, and were too large; hence they were not well adapted for use on infants. To obviate this difficulty he had had constructed a tongue depressor which was sufficiently small, and which was curved forward, so that when its end reached the tip of the epiglottis the base of the tongue would be well controlled. (One reason that pharyngitis and tonsillitis were often overlooked in infants was that the throat was not properly inspected.

* * *

MERCURIAL SUPPOSITORIES IN HEMORRHOIDS.—J. Klewitzow (*British Medical Journal*) finds the use of calomel in the form of a suppository very beneficial in cases of hemorrhage due to piles. He tried it on himself and in a series of cases, mostly of old standing, and the results were highly satisfactory. He claims that it immediately arrests the bleeding, lessens the frequency and chances of its occurrence and greatly reduces the size of the hemorrhoids (probably by inducing contraction of the muscular walls in the vessels), and hence the subsidence of the pains on defecation and movement. Altogether not more than from twelve to fifteen suppositories were used in a single case, one suppository being daily introduced into the rectum and left there for twelve or twenty-four hours according as the condition of the case demanded.

* * *

PURE WATER.—While the people in all large cities are crying for pure water, Koeppe, in the *Deutsche Medicinische Wochenschrift*, tells us that chemically pure water is poisonous to human beings. Distilled water and glacier water is especially pure and free from salts, and the continued use of this is said to act as a powerful diuretic and to extract the salty matters from the body. Persons drinking distilled water should remember these facts.

MARYLAND Medical + Journal.

PUBLISHED WEEKLY.

TERMS OF SUBSCRIPTION, \$3.00 a year, payable in advance, including postage for the United States, Canada and Mexico. Subscriptions may begin with any date.

DATE OF PAYMENT.—The date following the subscriber's name on the label shows the time to which payment has been made. Subscribers are earnestly requested to avoid arrearages.

CHANGES OF ADDRESS.—When a change of address is ordered, both the old and new address must be given. Notice should be sent a week in advance of the change desired.

TO CORRESPONDENTS.—Original articles are solicited from members of the profession throughout the world. Reprints will be furnished at cost of production if the author's wish is so stated.

CORRESPONDENCE upon subjects of general or special interest, prompt intelligence of local matters of interest to the profession, items of news, etc., are respectfully solicited. Marked copies of other publications sent us should bear the notice "marked copy" on wrapper.

MARYLAND MEDICAL JOURNAL,
Fidelity Building, Charles and Lexington Streets.
BALTIMORE, MD.

WASHINGTON OFFICE:
Washington Loan and Trust Company Building.

BALTIMORE, APRIL 15, 1899.

THE amended and elaborated programme of the centennial meeting of the Faculty appears in this issue, and it includes **The Faculty's Centennial.** about all that is expected to take place within those four days. It has been a very difficult work for the various committees, and the members of these committees deserve great credit for their indefatigable industry and faithful attendance on the preliminary meetings.

As is seen from a careful perusal of this programme, almost every hour of the time is taken up with some interesting event. While there is enough play and amusement to attract those wishing recreation, there is also a number of excellent addresses by specialists and just enough of these addresses to be profitable without being tiresome.

The nights will be spent in receptions, dinners, etc. The Faculty dinner will be held Friday night, and already a large number have shown their intention of being present. The list of subscribers to the centennial fund for carrying out this elaborate programme has been very gratifying. If there should lack money there will be found generous members willing to make up the deficit, and should there be a surplus subscribers may rest assured that the money left over will be put to a good use.

There will be some private dinners, one of

which will be tendered by Dr. Osler to the trustees and officers. On Wednesday there will be private receptions, one by Dr. Osler and one by Dr. Kelly, and to these it will be the endeavor of each host to invite without any exception all the out-of-town members and all the guests and only some of the city members. Drs. Tiffany, Ashby and some others will also give private smokers of an informal nature. No one will be purposely slighted, and all visitors may be sure of a hearty welcome.

Members and others are earnestly requested as far as possible to register promptly and to follow the schedule of the programme and to be present at the hour named, so that there may be no delay in the proceedings. The various exhibitions should not be slighted, and not only should those of historical interest be studied, but the book, drug and instrument displays should all receive attention from all persons present, who may be sure of a hearty welcome from the gentlemen representing these branches of the healing art, who, as usual, will be liberal with their samples and restoring draughts.

If there is anything to be added to this programme it will appear in the next issue of the JOURNAL.

* * *

It is said that physicians loudly proclaim their successes and bury their mistakes. It should be remembered that **Errors Acknowledged.** a frank acknowledgment of errors tends to keep down pride and, at the same time,

it helps others. Dr. Robert T. Morris in a recent issue of the *New York Medical Journal* speaks of the errors he has made in over two hundred consecutive cases diagnosed as appendicitis. Fortunately this was not a case of burying mistakes, for none of his errors were fatal, but he is honest enough to show how he had made mistakes in diagnosis and had been misled into a useless operation; but so successful was his technique that, with the exception of the discomfort to the patient, no bad results followed. Again, to his credit be it said that in very few of these cases did he make errors.

It takes a very brave man to acknowledge the mistakes he has made, and when he takes the time to put on record the fact that he has made these errors he should receive the credit of more than ordinary bravery. The surgeon, as a rule, is ever ready to tell of his cures; let him occasionally mention his failures.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending April 8, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	1	..
La Grippe.....	..	4
Pneumonia.....	..	20
Phthisis Pulmonalis.....	..	26
Measles.....	..	..
Whooping Cough.....	..	..
Pseudo-Membranous Croup and Diphtheria. }	23	2
Mumps.....	..	..
Scarlet Fever.....	6	1
Varioloid.....	..	..
Varicella.....	2	..
Typhoid Fever.....	3	3

New York is to have a school for public health.

The city of Liverpool is about to build a new hospital for consumptives.

Dr. Walter B. Lafferty of Crozet, Va., was killed by a train last week.

The nurses of Pittsburg have combined to keep up a uniform rate of charges.

The daily press announce that Bra of Paris has discovered the parasite of cancer.

The Sixth International Homeopathic Congress will be held in Paris in the summer of 1900.

At the commencement of the Homeopathic Medical School this week degrees were conferred on eight candidates, three of whom were women.

Dr. M. D. Hoge, Jr., of Richmond has been elected a fellow of the Royal Microscopical Society of London.

Among the collaborators on the *St. Paul Medical Journal* are Drs. W. Osler, H. A. Kelly and T. B. Fitcher of Baltimore.

Politics is said to prevent Philadelphia from having pure water. Politics of that kind does a great deal of harm in many places.

The sixty-seventh annual meeting of the British Medical Association will be held at Portsmouth, England, August 1, 2, 3 and 4.

New York is proposing to imitate some European cities in having a physician in attendance at every performance of every theater.

The Baltimore University School of Medicine has held its annual commencement. There were forty-eight graduates, one of whom was a woman.

Drs. Wm. R. Stokes and Jose L. Hirsh will begin May 1 a course in pathology and bacteriology for physicians at the University of Maryland laboratories.

An exchange says that the widow of the late Sir Morrell Mackenzie is earning her living as a modiste, and intends to sell her husband's library for her support.

Physicians who had questioned the constitutionality of the State medical law will be gratified to know that the State dental law has been declared constitutional by a Baltimore judge.

The Frederick County Medical Society held its regular meeting last Wednesday. Papers were read by Drs. R. W. Johnson of Baltimore, D. M. Devilbiss, Franklin B. Smith and H. F. Getzendanner of Frederick.

Cincinnati has a physicians' building in which there is a drug store, reading-room and laboratories of all kinds equipped for the use of the sixty physicians which this building will hold.

The New Orleans Board of Health is considering the adoption of an ordinance making ventilation compulsory and requiring all householders to open their windows in favorable weather. This attempt at paternalism is rather amusing.

Dr. William Nelson, a prominent physician of Danville, Va., died last week at his home after a short illness from septicemia contracted while operating on a septic case. Dr. Nelson was forty-five years old and was a graduate of the University of Maryland in 1882.

Dr. Robert W. Johnson, professor of surgery at the Baltimore Medical College, is delivering the First Aid Annual Course of Emergency Lectures at the Y. M. C. A. Building, April 10, 17, 24, May 1, 8 and 15, at 8.15 P. M. The public is invited and there is no charge.

At the next meeting of the International Congress of Gynecology and Obstetrics to be held at Amsterdam August 9 to 12, it is said that Secretary Hay has appointed Dr. J. M. Baldy to represent the United States. It is also stated that delegates will be sent from New York, Washington, Chicago and Boston. It is strange that Baltimore is not mentioned.

Washington Notes.

Dr. Wm. B. French has been appointed an inspector to investigate the epidemic of cerebro-spinal meningitis.

Major H. D. Thomason, brigade surgeon, and Acting Assistant Surgeon Luke B. Peck will accompany the Tenth Cavalry to Cuba.

Acting Assistant Surgeon H. M. Cohen, now at Camp Wetherill, S. C., has been ordered to this city to report to the surgeon-general.

Major E. O. Shakespeare, brigade surgeon, U. S. V., of this city, will make a short trip to New York on business pertaining to the Medical Department.

There were five cases discharged from the smallpox hospital Monday, leaving sixteen patients under treatment. No additional cases have been reported for several days. Deaths from cerebro-spinal meningitis are being reported every day. There has been forty-three deaths from this disease since the latter part of February.

The following was the programme for the District Medical Society Wednesday evening: Dr. Vaughan—"A Few Surgical Cases in which the Roentgen Ray Was Used;" Dr. Dufour—"Influenza Otitis;" Dr. Bryan—"Abscess of the Frontal Sinus, etc., Resulting in Meningitis and Death, Case and Specimen;" Dr. Lamb—"Specimens, Contracted Kidneys, Uterus from a Case of Abortion, Cerebro-Spinal Meningitis."

A few knowing persons have, through the local press, been displaying their ignorance upon the subject of cerebro-spinal meningitis. One writer attempts to show the relation between cerebro-spinal meningitis, pyemia, septicemia, anthrax and vaccination, and proves, to his satisfaction, that our present epidemic of meningitis is the result of vaccination. Of the first twenty-two fatal cases an investigation shows the relation to vaccination. Two were vaccinated recently, one had not been vaccinated for over a year, three not for several years, another not for three years, another not for four, three had not been vaccinated for five years, one not for seventeen, another not for twenty-one years. Three—one seventeen years, one thirty-one years and one fifty-five years—were vaccinated only in childhood. Five had never been vaccinated.

Book Reviews.

A TEXT-BOOK OF PATHOLOGY. By Alfred Stengel, M.D., Instructor in Clinical Medicine in the University of Pennsylvania, etc. With 372 illustrations. Price, cloth, \$4. Philadelphia: W. B. Saunders, 925 Walnut street. 1898.

Dr. Stengel is so favorably known to the medical profession of this country that any book emanating from his pen is sure to receive more than passing attention. The Text-Book of Pathology which he has just written sustains the reputation he has already achieved. Within its limits it was impossible, of course, to give exhaustive descriptions of the various pathological entities if any pretense was made to cover the whole ground. The descriptions in it are, however, concise and clear and the author has succeeded in a remarkable way in seizing upon the salient features of the different pathological processes. All non-essential information has been omitted and the student will find in it a safe guide for his elementary work in pathology.

The book would have been improved somewhat by the addition of a few bibliographical references referring to the more important articles bearing upon the subjects discussed. So that students who wish to go beyond the limits of a text-book could find their way in medical libraries.

The illustrations are numerous and well printed, many of them being in colors. The author has been wise in choosing typical illustrations from various bibliographical sources rather than insisting upon entirely original drawings. The drawings, which are original, are on the whole good, having been taken evidently from typical preparations of the disease which they illustrate. The volume is likely to have a wide distribution among the medical students of this country.

REPRINTS, ETC., RECEIVED.

The Advantage of Physical Education as a Prevention of Disease. By Charles Denison, A.M., M.D. Reprint from the *Bulletin of the American Academy of Medicine*.

Some Remarks Concerning Rectal Affections, with Especial Reference to the Physical Exploration of the Rectum. By Lewis H. Adler, Jr., M.D. Reprint from the *Therapeutic Gazette*.

MARYLAND MEDICAL JOURNAL

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Vol. XLI.—No. 16.

BALTIMORE, APRIL 22, 1899.

Whole No. 943

Historical Department.

Under direction of EUGENE F. CORDELL, M.D.,
Author of "Historical Sketch of University of
Maryland" and Editor of "Centennial Volume"
of Medical and Chirurgical Faculty.

II.

A DOCTOR'S LIFE IN THE BACKWOODS ONE HUN- DRED YEARS AGO.

WHEELING, W. VA., was even then a place of considerable trade, with a settlement on either side of the Ohio river. But as soon as the traveler left the narrow strip of habitations skirting the river bank he met on all sides a dense wilderness. Travel in this region was done on foot or horseback; merchandise and produce were conveyed on pack-horses. There were no roads, no bridges. The nearest approach to the former was a narrow and solitary path extending hundreds of miles through "a howling wilderness." The streams, shallow and readily fordable in summer, were at times impassable, or could only be crossed by swimming the horses over. One might travel a whole day without seeing a single cabin. The mail reached the settlement but once a week. At this time the first road into Ohio was cut, and the doctor saw the first wagon cross the river destined for the interior of the State. For greater security, merchants traveled in companies, having their money sewed up in long rolls in raw buffalo hides, which when dry were exceedingly hard to open. At night the horses were turned loose to feed in the woods, as there was no other means of subsistence. To collect them again in the morning was often a difficult task; by placing a bell, however, upon one which

was considered the leader, the others would generally follow when he was led to the place of encampment. Hunting parties of Indians were frequently encountered in these journeys, for the red man still frequented the neighboring forests and mountains, yielding slowly and reluctantly before the advance of a superior race.

The land along the streams, which was low, rich and moist, and subject to overflow during the annually recurring spring floods, being chiefly occupied at first, malarial fevers were especially prevalent. Every form of this protean, so-called "bilious" fever, was seen by the young doctor during the period of his residence there, extending over more than two years. Although cases were much modified by circumstances, he concluded that all were referable to one and the same cause. His armamentarium for contending with it included the lancet, calomel, blisters, cinchona, antimony, ammonia and opium, and he probably valued these agents about in this order.

Two cases afford an insight into the hardships of his professional life and experience. He was called to see a man whose hand had mortified in consequence of a neglected bite and exposure during intoxication. It was necessary to amputate the limb. The patient lived seven miles beyond the river, on the Ohio side. Notwithstanding this and the midwinter season, he had to be visited daily for many days. At first the river was frozen over and could be crossed on the ice, but the ice broke up and continued running in the swollen stream for more than a week. During this period no one would venture over, not even the postman. In the emergency the doctor prevailed upon a canoesman, "a simple, honest fellow, in

a buckskin hunting shirt, trousers and moccasins," to carry him across in his canoe, a vessel made by pointing a log at both ends and cutting a cavity along its whole length. The doctor extols the humanity of this good man, who, without expectation of gain—for his charge was a mere pittance—continued at the risk of his life to render this daily service. He portrays in admiring terms the dexterity with which his skillful guide directed the frail boat amidst the crushing ice, often a foot thick, and the groaning waters, using paddle or pole, as circumstances required, to escape impending danger, and to trace his zigzag course across the stream. He had the good fortune to escape all these dangers and the satisfaction to restore his patient to health.

On another occasion he was called thirty miles to see a man suffering with abscess of the liver. His lonely path led along a ridge, difficult and dangerous to travel, and while on the way he was overtaken by the darkness of a starless night. He reached the foot of the ridge safely, and there found an unoccupied cabin, without door and with the spaces between the logs unclosed. Here it became necessary for him to spend the night. Groping his way in, he tied his horse, and spreading his overcoat on the floor, lay down to repose. But the gnawing of his horse upon the logs, the unceasing song of the whip-poor-will and the fear of the deadly rattlesnake banished all slumber, and he was deeply thankful when the rays of the sun penetrating between the logs told him that it was dawn. The patient's condition was so critical that the doctor remained with him continuously for three days, tasting no food during all that time except boiled green corn and milk, which diet constituted the sole sustenance of the wretched people who inhabited the cabin. A second visit was made, and again the doctor was belated, narrowly escaping being dashed over frightful precipices, losing his way and having to alight sometimes and grope about the forest until he could regain the path. Added to his danger and discomfort was the peril of encountering the bear, the wildcat, the panther and the swarms of venomous snakes that frequented those wilds.

Such were briefly some of the experiences with which the physician of 100 years ago had to contend. Fortunately, in the case of the subject of this sketch, they did not continue long, for he was not destined to the obscure life of a backwoods physician. Providence had ordained for his talents a wider field, and after a brief experience on the Ohio, he removed to one of the largest of the Atlantic seaboard cities, where for many years he adorned his profession by his lofty character and shed luster upon his adopted city by his surgical achievements.

Horatio Gates Jameson was born in York, Pa., in 1778, being the son of Dr. David Jameson, a Scotch physician who emigrated to Pennsylvania and served as surgeon in the French and Indian War. A brother, Thomas, also adopted the medical profession and practiced at York. After studying under his father and spending some years in Pennsylvania and Virginia, he settled in Baltimore in the summer of 1806. He informs us that he attended lectures here before the medical college was founded, probably those given by Dr. Davidge. He afterwards became a student at the college, and received the degree of M.D. from it in 1813, his thesis being "On the Supposed Powers of the Uterus." In 1817 he published a work on "Fever," being lectures upon that subject which he had delivered, which shows much research, erudition and liberality of view and fine command of language. In the next year appeared a work by him entitled "American Domestic Medicine," 8vo., pp. 161, designed for the use of families. In 1827 he was mainly instrumental in founding the Washington Medical College, an institution in which he held the chair of surgery until 1835. In 1829 he began the publication of the *Maryland Medical Recorder*, continued until 1833 (three volumes). This work was largely from his own pen and does him great credit. He also contributed largely to the *American Journal of the Medical Sciences*. In 1835 he resigned his chair here to accept a similar appointment in the Cincinnati Medical College. In 1854 appeared a work by him on cholera, the result of a large experience obtained during the epidemics of that disease

which he had seen during his residence in this city. For many years he held the positions of surgeon to the City Hospital, of consulting physician to the city Board of Health and physician to the Jail. He also held the position of superintendent of vaccination. In 1830 he visited Europe and was received by the leading surgeons there with distinguished consideration. He died in Philadelphia in July, 1855. Dr. Jameson was not a good lecturer, being painfully diffident and having a weak voice. He was a fine writer, and as a surgeon, bold, ingenious and original. But he was not reckless in his surgical work. His merits were well recognized by those most capable of judging him, and his name must be placed alongside those of Mott, Warren, Gibson, Smith and Dudley. His leading surgical achievements are enumerated in Quinan's "Annals of Baltimore," page 117.

Original Articles.

FORCED INFLATION AND PNEUMO-MASSAGE IN THE TREATMENT OF OTITIS MEDIA.

By Edward E. Gibbons, M.D.,

Chief of Clinic to the Professor of Diseases of the Eye and Ear, University of Md.; Assistant Surgeon Presbyterian Eye, Ear and Throat Charity Hospital, Baltimore, Md.

READ BEFORE THE MARYLAND OPHTHALMOLOGICAL AND OTOLOGICAL SOCIETY, MARCH 23, 1899.

It is not my purpose to set forth in this paper any new or particularly original method of treatment, but only to draw attention to what, to my mind, is a very valuable, but neglected, therapeutic measure in the treatment of chronic inflammation of the middle ear.

Politzerization is recognized as being of value in most middle-ear catarrhs, but fails to alleviate in many cases where adhesions tie down the handle of the malleus or drum membrane and interfere with the proper motion of the ossicula, because enough force cannot be obtained with the air-bag to rupture or stretch the bands of newly-formed tissue within the

tympanum, so that the Politzer air-bag is seldom used by some aurists. By inflation of the middle ear pressure is equalized on both sides of the drum membrane; the engorged vessels are emptied by the concussion of air upon their walls; tissue metamorphosis is quickened and the cavity of the tympanum cleared of any contained fluid, and lastly, but not least important, the membrana tympani is reposit in its normal position and false bands of connective tissue ruptured if enough force be employed.

Almost all authors in speaking of the use of the air-bag warn the operator against using too much force lest the tympanic membrane be ruptured and harm done. This danger, I think, is greatly exaggerated. According to experiments made by Dr. Bishop the amount of pressure obtainable from a Politzer air-bag varies directly with the size of the bag employed, a six-ounce bag, giving six pounds pressure, and one of twelve ounces, twelve pounds pressure to the square inch when squeezed by a strong hand. Drs. Bishop and Pynchen, with a few others, advocate the employment of much greater pressure or force than this in treating adhesive inflammation of the middle ear.

Some time before reading Bishop's treatise upon the ear, throat and nose the writer had been in the habit of employing fifty and sixty pounds air pressure in the treatment of these cases. The use of this high pressure does away with the so frequent need of using the Eustachian catheter, as the tympanum can be inflated unless the Eustachian canal is absolutely impervious.

The point aimed at in the treatment of chronic otitis media is the relief of deafness and tinnitus. Neither of these conditions is positively alleviated unless the drum membrane can be reposit and the articulations within the tympanum made more supple. To do either in most cases even through a fairly patent Eustachian tube needs inflation with a pressure of forty or fifty pounds to the square inch. The greatest benefit is derived from frequent repetition of this forced inflation or by forced pneumo-massage through the Eustachian canal.

The inflations should be as many as forty or more to the minute.

A word about the means of obtaining the necessary amount of air pressure. All of the automatic water pumps on the market today for compressing air are constructed to be used as beer pumps and arranged to give as little air pressure as possible. By taking out the valve regulating the inflow of water the pump can be made to do twice the work. The pneumo-massage can be administered through a nose-piece similar to Buttle's or Bishop's improved inflator, to which is attached the cut-off from the air reservoir. The one essential is that the hole through the nose-piece should be larger than those in common use, so as to carry a great volume of air. The ideal instrument for giving pneumo or vapo-massage through the Eustachian tube is the Multiple Globe Nebulizer, with which you are all familiar. The valve controlling the outflow of air from the instrument is admirably adapted to its purpose.

By raising an adjusting collar the outlet is closed by a spring and only opened by pressure or tapping upon a button on the end of a small rod passing through the valve and operating upon the washer closing the outlet. One can get as many concussions or inflations of air per second as it is possible to tap the button. This arrangement is greatly superior to the rotary valves used upon other nebulizers.

To inflate the ears the patient may say "K," Hook," or what not, each time the valve is tapped and opened, but better is it to have the patient blow forcibly through the mouth with the cheeks distended, thus raising the velum palati. This latter method allows the operator to make more inflations in a given time. The palate also acts as a safety-valve for the ears, its resistance being overcome and the air coming out the mouth if too much force is used. At times, though seldom, it is necessary to perform the massage through the Eustachian catheter.

The writer is in the habit of using air medicated with the following solution:

- ℞ Iodine crystals, gr. xxx.
- Carbolic acid, ʒi.

Menthol, ʒiii.

Oil of eucalyptus, ʒi.

Liquid albalener, q. s. ad., ʒiv.

(This is the so-called Globe solution No. 8), and would desire the vapor hot, as a draft of cold air may do some harm by subsequently increasing the congestion of the parts, and that hot air would be more relaxing to the stiffened joints. As yet no satisfactory way has been found, although several methods have been tried. The reasons in the minds of many why it is deleterious to use high pressure in inflating the tympanum are:

1. There is danger of rupturing the tympanic membrane. This would not occur save in an old atrophic membrane, and would do no harm, but perhaps good, by allowing the sound waves to enter and reach the inner ear directly if the opening remained patulous, or benefit by promoting shrinkage in a too flaccid drum-head if it healed.

2. The possibility of dislocating the stapes inward through the oval window, a thing which could not occur before the induction of vertigo.

During the massage the pressure is gradually increased and stopped the moment the patient feels dizzy. Air massage through the external auditory canal is inferior to that through the Eustachian tube, but may be used in conjunction with the latter, and should be chiefly or entirely of a drawing or sucking nature. Forced vapo-massage is especially applicable to adhesive aural catarrh, but also of much service in otitis media residua in overcoming ankylosis between the ossicles and in relieving thickenings within the tympanum. It has proven of service in the writer's hands even when large perforations of the membrana tympani existed, probably doing good by imparting motion to the stapes in the foramen ovale.

Several times the hearing has been markedly improved after one seance in case where Politzerization produced no appreciable effect. The patient at times hears a snapping noise, probably indicative of rupture of bands of adhesion between the long process of the incus and handle of the malleus, or between the manubrium mallei and promontory. I

will not weary you with a detailed account of cases illustrating the value of this line of treatment, but simply append the results in a few cases only, selected at random from my case-book.

All of these cases had been treated by other non-operative methods, but with little or no improvement.

Case 1. Mr. P., aged seventy-nine; duration of ear trouble twenty years, deafness gradually increasing until at the present time he hears only the loudest voice with the aid of a trumpet; much sunken and thickened drum-head; malleus handle immovable and resting upon the promontory; pneumo-massage through the Eustachian tubes was begun gradually, increasing the pressure to sixty pounds. The first treatment, lasting five to eight minutes, enabled him to hear loud voice close to the ear without the trumpet; the third treatment brought his hearing up to loud voice at three feet. One week after beginning treatment (receiving them every day) he heard voice, conversational tone, at three feet.

Case 2. Dr. F., aged sixty-five; progressive deafness of ten years' standing; distressing tinnitus and vertigo; adhesive aural catarrh; drum-heads thickened and well drawn in; handle of malleus only partially movable. Hearing for voice—loud voice at three feet; hearing for watch 0-60. Two weeks' treatment (treatments tri-weekly) relieved his tinnitus entirely, dissipated his vertigo and brought his hearing up to conversational tone five feet and for watch 10-60, at which time he ceased treatment of his own accord.

Case 3. Miss D., aged thirty-five; bilateral otorrhea since early childhood; deafness has been increasing of late; after the otorrhea ceased adenoids and occluded choanae keeping it up. Hearing was found to be for watch 0-60 each; for voice, very loud voice, at two feet. Six weeks of treatment gave hearing, forced whisper, one foot.

Case 4. The next case is one of otitis media residua. A girl of nineteen years; deaf since early childhood; discharge long past ceased; could not be made to hear the voice at all unless one ap-

proached to within six inches of her ears and shouted. The deafness was due to the chronic suppuration and the resulting hypertrophic changes. The patient had never heard it thunder until after she began to improve. After four weeks' treatment, using the catheter to administer the massage, and with fifty pounds pressure, hearing improved to loud voice at five feet.

In all these cases at least fifty pounds pressure was used and treatment given tri-weekly, save in the first case. Of course, the nose and naso-pharynx received the treatment indicated. I believe any middle-ear condition causing deafness by ankylosis of the ossicula or by thickening of the submucosa to be benefited by forced vapo-massage when Politzerization and massage through the external auditory canal fail.

In the treatment of chronic Eustachian salpingitis vapo-massage is a useful adjunct and superior to use of bougies in overcoming the stenosis of the tube due to submucous thickening, the frequent and rapid concussions of the stimulating and antiseptic vapor no doubt hastening the absorption of the newly-formed tissue. The several cases following illustrate the good results to be derived in this class of middle-ear troubles:

Case 1. Miss H.; discharging left ear for past two years; quite deaf; constant tinnitus; small perforation, with thickened edges in anterior inferior quadrant of membrana tympani. Dench's and C fork of Hartman's set not heard; perception of upper tones unimpaired; watch 0-60; left Eustachian tube impervious to air by Valsalva's or Politzer's method; air entered the tympanum only with pressure of forty pounds to the square inch. Fifty pounds pressure was employed in the treatment. Result after ten treatments: Tube patent to low air pressure (Valsalva's method); discharge ceased; hearing for watch 5-60; tinnitus only occasionally.

Case 2. Mrs. H.; complained of fullness and tinnitus in the left ear; all tones heard; hearing for watch 36-60; drum-head drawn in, but freely movable. stenosed left Eustachian tube; several weeks' massage treatment, with fifty pounds

pressure; relieved tinnitus and feeling of fullness in ear; hearing for watch 50-60.

Case 3. Mrs. C.; says her ears have been stopped up for some time; worse the past six weeks; hearing for watch 3-60 each; treatment gave whispered voice, right three feet, left one foot, for watch 30-60. The tubes were only patent to thirty pounds pressure and over. First treatment improved the hearing 50 per cent.

Case 4. Miss H.; increasing deafness for past six months; hypertrophic catarrh of nose, naso-pharynx and Eustachian tubes; hearing for watch, right 12-60, left 3-60; two months' treatment rendered tubes patent to twelve pounds pressure and improved; hearing for right ear 30-60, for left ear 15-60.

One great disadvantage in this line of treatment is the enormous amount of compressed air needed. Each treatment uses at least five gallons of air at fifty pounds pressure, so that one is not always able to treat more than a few cases in succession.

MASSAGE IN AURAL DISEASES.

By A. D. McConachie, M.D.,

Assistant Surgeon to the Presbyterian Eye, Ear and Throat Charity Hospital; Ophthalmologist to Bay View Hospital, Baltimore, Md.

READ BEFORE THE OPHTHALMOLOGICAL AND OTOLOGICAL SOCIETY, MARCH 23, 1899.

PERFECT hearing depends upon the preservation of the right relationship of the various parts of the sound conducting apparatus and not, as formerly believed, to any great extent upon the integrity of the drum membrane. Any diseased process in the tympanic cavity or appendages thereof may seriously impair this relation and interfere with hearing. If the external meatus be clear and the nerve intact, the drum being perforated or destroyed, hearing may be perfect, if the ossicular chain be normal and perfectly adapted.

Disease processes may be suppurative or non-suppurative; to the latter category belong that large class of aural patients who seek relief for their distressing deafness with or without tinnitus varied in character. These cases of chronic

deafness are said to be of "catarrhal origin," and include the hypertrophic and atrophic forms. Otologists do not see these cases in their initial stages, when the impairment of hearing is due to functional and not structural conditions. Patients rarely seek relief until marked deterioration in one and more frequently in both ears, accompanied possibly by tinnitus, has occurred—due to interference with the freedom of motion in the sound-conducting apparatus. There may be an abnormal attachment between the ossicles or between the stapes and oval window or an attachment of the drum to the promontory. If there be any involvement of the nerve or labyrinth it of course has a marked effect on the hearing.

Hitherto, a multiplicity of measures and operations have been devised for the relief of such patients, with but poor results. Such patients come to us quite frequently with some such statements as these: "Doctor, I am deaf from catarrh, and I am growing rapidly worse; I now have all sorts of sounds in my head. I have been treated for a long time; I have used the air bag, gargles, etc., but I do not get any better, and my doctor says it is a waste of time and money for me to consult an 'ear doctor,' because they cannot do me any good." Such opinions and statements on the part of many physicians are common, but erroneous. As stated previously, we do not see such patients early enough, in the incipency of adhesive formations, to prevent, or, should any exist, to remove any attachments of the ossicles to each other or to the surrounding parts. With our advanced methods in aural work we are now able to offer this class, in whom ankylosis of the contents of the tympanic cavity is well advanced, something to check the rapid advance of the process, and in many instances either improve or restore hearing and ameliorate the distressing tinnitus.

The general practitioner is not alone culpable for the layman's belief in the incurability of chronic deafness and tinnitus, as aurists are divided in their opinion, many contending that nothing that will afford material benefit can be done;

many more, and their numbers are rapidly increasing, believe in the possibility of accomplishing much for such patients. It is true that our diagnosis as to the exact seat of the lesion or lesions cannot be perfect, but this much is certain, that we can say that an ankylosis does or does not exist somewhere in the ossicular connection. And because it exists we are not justified in dismissing the patient because we cannot offer a cure. We can offer such patients some relief or an arrest of the further progress of their trouble. This something, in conjunction with advice as to dietary, hygiene and general sanitary measures, is massage. Again otologists are divided as to aural massage utility—one class, who have failed to thoroughly test its merits, hence know little; another, those who have given it a long and thorough trial by each and all of the varied methods, and hence know that much good follows its use and that there is much to learn.

Aural massage is based on the same general principles as massage in general. General massage increases metabolism, aids nutrition, stimulates nerves and nerve centers, overcomes impeded circulation, gives mobility to ankylosed articulations and increases muscular nutrition and contractility. This is its sphere of utility as applied to the ear in chronic catarrhal deafness. It stimulates the circulatory apparatus, and thus, in the hypertrophic conditions, a more rapid absorption and excretion of the redundant tissue is brought about. In the atrophic conditions it quickens the circulation, and thereby more nutrition is brought to the part and the retrograde process checked. No matter whether we have to deal with an ankylosis of the hypertrophic or atrophic character, it is useful, as both are only different stages of the same pathological process. Our choice of methods is varied, all of which have merit, some of more use than others, depending upon conditions found in each individual, from the experience and good judgment of the observer.

Massage methods to break up adhesions within the middle ear date from Guyot, who invented the Eustachian catheter and reported it to the Paris

Academy of Medicine in 1724. Valsalva's and Politzer's methods are but another application of Guyot's, the idea being to open the Eustachian tube, and thus relieve the tension of the drum and ossicles and force air into the middle ear, and thus forcing the membrane and ossicles back into position and loosening and breaking any attachments that had been formed.

Massage may be applied within or without the drum cavity—massage by catheter, Valsalva's or Politzer's method, or by means of compressed air tank in use with a nebulizer, with or without medicaments, have long been in use, but it is not to these methods which operate through the Eustachian tube that I wish to refer, but to those methods that operate through the external meatus by increasing and diminishing pressure on the membrane and chain of ossicles. We have the choice of four methods of procedure:

1. By means of sounds produced by instruments or the voice—phono-massage.
2. Direct mechanical massage by means of probes or other instruments brought in contact with the membrana tympania—pressure-massage.
3. By means of a column of condensed and rarefied air in contact with the drum—pneumo-massage.
4. Mixed massage—a combination of pneumo- and phono-massage, with electric faradic action.

Phono-massage by itself by any of the various noise-producing apparatus has given little, if any, permanent benefit; temporary relief from tinnitus frequently follows, possibly psychical in its nature.

Pressure massage by means of probes operated by hand, as Lucae's, are extremely painful and require much delicacy of manipulation and involve much risk from injury with but little benefit. Pressure massage is liable to jam the stapes into the round window and increase labyrinthine pressure, and forces the drum inward and favors retraction. They increase vascularity to too great an extent and thus aggravate the inflammation.

Pneumatic massage by means of a column of air is the most generally practiced

and gives the best results. It may be accomplished in many ways:

1. By Siegel's speculum operated by the air bag, rubber bulb, syringe or mouth. It is useful if not too violently applied and if care is taken not to blow or compress the column, but first exhaust and then compress.

2. By Delstanche's masseur, which, in my opinion, is too violent as it is usually used, causing harmful congestion. If carefully used on the exhaust first, its use is beneficial.

3. By the finger-tip, either inserted into the meatus or applied over the tragus. Its action compresses, hence is objectionable, and may result in flabbiness of the drum and irritation.

4. By rubber tube and ear tip operated by the mouth, bulb, syringe or air bag.

5. By acting on the piston principle. Such is painless, harmless and markedly beneficial in a large percentage of cases. The Chevalier Jackson masseur I have used for the past three years and find its mechanical construction well adapted for aural massage. It can always be started on the exhaust stroke and has valvular arrangements, so that rarefaction recurs at every stroke and compression is impossible. Its energy of action can be regulated by the stroke of the piston by placing the crankpin in one or other of the different holes in the crank disk. Its speed is regulated by the speed of the motor used. The writer attaches his to the street current, which is so cut down as to suit the motor attached to the masseur. High speed is not desirable, as the separate character of the strokes is lost and a continuous sound is produced. The limit for distinct exhausting and releasing strokes is 150 to the minute. High speed, compression and violence are responsible for many of the failures in which it is used.

6. By a pneumo-phono masseur in conjunction with faradization. This method is well embodied in an instrument put out by Waite & Bartlett. It combines various principles; sound vibration can be applied to one or both ears in addition to faradization at the same time. Its pneumatic effect is only slight as compared to the last-described instrument.

Oto-massage by passive motion in rigidity of the ossicular chain should relieve or cure. Does it? Personal observation for the past three years convinces me of its efficacy. Whilst I cannot agree to it as being a cure to all or beneficial to such a large percentage of cases as its more enthusiastic advocates, my records show benefit in fully 50 per cent. of the hypertrophic or atrophic varieties. Its beneficial effects in the after-treatment of acute catarrhal (suppurative and non-suppurative) is certainly marked, lessening the deafness, tinnitus and vertigo. Its use is conjoined with appropriate treatment to the naso-pharynx when indicated. In osseous sclerosis it is useless. It is not a specific, but when success by other methods (catheterization and inflation) has not been attained, I think no otologist has done his full duty to a patient with chronic catarrhal deafness from ankylosis until he has tried faithfully the possible benefits of aural massage. It is harmless if not beneficial. It may arrest the progressive and hopeless deafness, even if it does not cure. It can be used in conjunction with catheterization, Politzerization and naso-pharyngeal treatment, and if it fail, operative procedures are as available as before.

In conclusion, facts outweigh mere theories. It is the spirit of the age to question every theory and demand the reason for its acceptance. Some physicians, like theologians, dread the arrival of new facts and new truths which necessitate change. It is more pleasant to believe that the final truths have been reached and the last word said. All of the facts and truths of the beneficial effects of aural massage are not known and only a few conclusions arrived at up to the present, but these conclusions show the need of research and the vast field of new facts and more exact explanation of the utility of massage on the ear. The incredulity and criticism of the method by our colleagues who refuse to test its merits cannot be expected to cause those of us who have discovered its merits to surrender and discontinue its employment. I have much respect for the opinions in opposition, but cannot be converted to its non-utility.

Society Reports.

MARYLAND OPHTHALMOLOGICAL AND OTOLOGICAL SOCIETY.

MEETING HELD MARCH 23, 1899.

IN the absence of the president Dr. Friedenwald, the meeting was called to order by Dr. H. O. Reik.

Dr. E. E. Gibbons read a paper entitled "Forced Inflation and Pneumo-massage in Diseases of the Middle Ear" (see page 245).

Dr. A. D. McConachie then read a paper on "Massage in Aural Diseases" (see page 248).

Dr. Reik said his experience with the massage treatment had been rather limited and probably not quite so satisfactory as that of many who use it more frequently. He thought Dr. McConachie made use of a very happy expression when he said it "ameliorated the trouble and perhaps in 50 per cent. there had been some improvement." In many of the cases he has treated there has been some improvement, but he has not been able to ascribe even part of the improvement to massage treatment. Many of these cases of chronic middle-ear catarrh show improvement under almost any treatment.

Dr. Reik said there were some points brought up that he wished to mention. One was in Dr. Gibbons' paper in regard to forced inflation under heavy pressure, say fifty or sixty pounds. He would like to know what the sensations are to the patient, that is, if it is painful. It was noticeable in Dr. Gibbons' report that the majority of his patients had stopped the treatment before he would have been willing to pronounce them well, and in only one or two cases had they carried the treatment out completely, and it had occurred to Dr. Reik that the reason for this might have been the painful nature of the treatment, or that the beneficial results reported by Dr. Gibbons were of a very temporary character. He said he had had no experience with the use of inflation by such high pressure as fifty or sixty pounds, and he would certainly hesitate to use it. There have been a great

many cases of rupture of the tympanic membrane produced by slight blows on the side of the head or a slight concussion where the pressure was considerably less than fifty or sixty pounds, and he would fear that the same effect might result from such inflation. Again, one cannot speak confidently of the results of such treatment unless he has seen the patient after a lapse of some weeks or months. In many of these cases temporary improvement may be brought about by a variety of measures, but the difficulty so far has been to maintain this advance.

Dr. Reik said he had not been in favor of the use of the bougie through the Eustachian tube, but he had used the Eustachian catheter very frequently. Dr. Gibbons seemed to be opposed to its use, and Dr. Reik said he would like to know his reasons therefor.

Dr. Woods said he thought these two very interesting papers touched upon matters about which very few knew much, particularly the massage as applied in the method described by Dr. Gibbons and by electrical apparatus through the Eustachian tube. He agreed with Dr. McConachie's conclusions that it is not right to believe that the last word has been said with regard to the treatment of these chronic cases.

In the cases of middle-ear catarrh he says one will tell the patient that he is willing to give him the benefit of this new method of treatment, and he thinks in many cases the patients cease coming simply because they do not get the benefit from the treatment to justify the financial outlay. He says the charging of office fees for work that is so clearly a matter of experiment has been a question with him.

The question of ameliorating the symptoms is one upon which the patient must judge, but this he thinks is about all one is able to promise. He does not think any method of massage or any treatment can be judged in these chronic progressive troubles by the immediate effect.

Dr. Gibbons said in regard to whether the employment of such high air pressure causes pain or not, of course to a very normal Eustachian tube in the nor-

mal ear that amount would cause intense pain. He had attempted to use thirty pounds to the square inch upon himself, and found it quite painful. Instead of using the bougie and catheter this high pressure was used in forcing the air in.

Dr. Gibbons said he had no particular objection to the use of the catheter, but he thought it better to do without it if possible. He says no matter how gently it is used it cannot help to cause some irritation about the mouth of the Eustachian tube.

He said a number of his patients had ceased the treatment because they were well enough. Of course, whether they would retain the hearing he could not say. He considered something gained if the trouble were ameliorated, even though it were contracted again, in which case the result would be as good as in the cases of intermittent fever, which, though cured for a time, recur after a period of two or three years.

Dr. McConachie said he was very glad to be able to endorse what Dr. Gibbons had said with regard to massage by means of the Eustachian tube and drum cavity. He says he uses it continuously and also in conjunction with external massage.

He thinks one of the most important things in the treatment of these chronic middle-ear troubles is the surrounding the patient with every measure conducive to perfect health, and by impressing upon them the necessity of plenty of fresh air and sunlight, with proper dietary and hygienic measures, we will do much to ameliorate the trouble.

PARALDEHYDE AS A RESPIRATORY SEDATIVE.—Dr. William Mackin takes occasion to speak in the *Lancet* in the highest praise of the use of paraldehyde as a respiratory sedative in spasmodic asthma, in purely functional respiratory troubles and in dyspneic conditions arising from various causes. He considers it a safe drug, and says that it may be given under almost all circumstances. He gives it with equal parts of orange peel and freely diluted with water. He fails, in his enthusiasm, to refer to its nasty taste and smell.

CENTENNIAL MEETING, MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

McCoy Hall, Johns Hopkins University,
APRIL 25-28, 1899.

TUESDAY, APRIL 25.

8 P. M.—Formal opening of the meeting by the Hon. Lloyd Lowndes, Governor of the State of Maryland.

Address by Dr. S. C. Chew, President of the Faculty.

9.30 P. M.—Reception by the Faculty.

WEDNESDAY, APRIL 26.

College of Physicians and Surgeons.

10 A. M.—Demonstration of the Pasteur Methods in the Diagnosis and Treatment of Rabies. Dr. Keirle. Dr. Keirle will give this demonstration in the Pathological Laboratory of the Johns Hopkins Hospital.

Owing to alterations in the building of the College of Physicians and Surgeons, the Faculty regret that they will not be able to hold any clinics or demonstrations.

*Baltimore University,
21 North Bond Street.*

10 A. M.—Medical Clinic. Gastrodiaphany. Dr. C. Urban Smith.

11 A. M.—Surgical Clinic. Dr. Biedler.

12 M.—Gynecological Clinic. Dr. Sellman.

12 M.—Eye and Ear Clinic. Dr. T. Cooke, Jr.

*Johns Hopkins Hospital,
Broadway.*

10 A. M.—Medical Clinic. Dr. Osler.

10.30 A. M.—The New Researches on Malaria. Dr. Thayer.

11 A. M.—Surgical Clinic. Dr. Halsted.

11 A. M.—Pathological Demonstrations. Dr. Welch.

12 M.—Gynecological Clinic. Dr. Kelly.

The Anatomical Laboratory and the New Laboratories of Pharmacology and Physiology will be open for inspection under the direction of Drs. Mall, Abel and Howell between 10 A. M. and 1 P. M.

1.30 P. M.—Luncheon at the Johns Hopkins University, provided by these Institutions.

3 P. M.—Scientific Meeting, McCoy Hall. Papers by:

Dr. Herman Knapp of New York, on Some Landmarks in the History of Ophthalmology.

Dr. E. H. Bradford of Boston, A Study of the Human Gait.

Dr. George Ben Johnston of Richmond, How Far Myomectomy is to Supplant Hysterectomy.

Dr. W. W. Johnston of Washington, J Hughes Bennett; His Services to Medicine.

Dr. Samuel Alexander of New York, The Management of Vesical Calculus in Prostatics.

8 P. M.—McCoy Hall. Annual Oration by Prof. W. W. Keen of Philadelphia, on The Debt of the Public to the Profession.

9.30 P. M.—Private Receptions.

Institutions Open for Inspection.

St. Joseph's Hospital, physician-in-charge, Dr. F. J. Kirby.

Bay View Asylum, superintendent, L. F. Zinkhan.

Baltimore City Insane Hospital, physician-in-charge, Dr. R. E. Garrett.

Church Home and Infirmary, physician-in-charge, Dr. F. D. Gavin.

Hebrew Hospital and Asylum, East Monument street, 10 A. M.

Presbyterian Eye, Ear and Throat Charity Hospital, 1007 East Baltimore street.

Home for Incurables.

Laboratories of the City and State Boards of Health.

THURSDAY, APRIL 27.

*University of Maryland,
Lombard and Greene Streets.*

10 A. M.—Cases Illustrating the Surgery of the Knee Joint. Dr. Tiffany.

11 A. M.—Medical Clinic. Dr. I. E. Atkinson.

11 A. M.—Abdominal Section. Dr. T. A. Ashby.

12 M.—Electrical Illumination of the Stomach. Catheterization of the Ductus Communis Choledochus. Dr. J. C. Hemmeter.

12 M.—Illustration of Methods Employed at the Municipal Bacteriological Laboratory. Dr. W. R. Stokes.

Baltimore Medical College,

Madison Street and Linden Avenue.

10 A. M. to 11 A. M.—(a) Exhibition of Pathological Specimens and Slides in Projection Microscope.

(b) Bacteria in Cultures and Under the Microscope. Dr. Potter.

(c) Demonstrations in Clinical Laboratory, Showing New Method of Determining Hemoglobin and Indican. Dr. Whitney.

11 A. M. to 11.30 A. M.—(a) Case of Melancholia Treated from Indications Given in Clinical Laboratory. Dr. Hill.

(b) Exhibitions of New Instruments in Nose and Throat Work. Dr. Merrick.

11.30 A. M. to 1 P. M.—(a) Abdominal Section. Dr. Moseley.

(b) Operation for Hemorrhoids. Dr. Earle.

(c) Exhibition of a Successful Case of Extirpation of Bifid Uterus at Full Term, Saving Mother and Child. Dr. Blake.

(d) Turning Off Carotids in Operations on the Head and Neck. Surgical Cases. Dr. Johnson.

Woman's Medical College,

1100 McCulloh Street.

The College Buildings and Laboratories will be open for inspection at 10 A. M.

Maryland Medical College of Baltimore,

1114 West Baltimore Street.

10 A. M.—Inspection of Laboratories and Demonstrations.

11 A. M. to 12 M.—Neurological and General Medical Clinics. Drs. Hodgdon and Kintzing.

12 M. to 1 P. M.—Surgical Clinic. Dr. Branham.

1.30 P. M.—Luncheon at the Johns Hopkins University, provided by these Institutions.

3 P. M.—Scientific Meeting, McCoy Hall. Papers by:

Dr. E. G. Janeway of New York, Clinical Observations on Some Forms of Heart Disease.

Dr. A. Jacobi, European Medicine about 1799.

Dr. H. C. Wood of Philadelphia, Nos-trums, the Profession and the Law.

Dr. Roswell Park of Buffalo, Cancer as a Parasitic Disease.

Dr. J. C. Edgar of New York, Obstetric Teaching.

7 P. M.—Annual Dinner of the Faculty.

Institutions Open for Inspection.

Union Protestant Infirmary, 1514 Division street.

Baltimore Eye, Ear and Throat Charity Hospital, 625 West Franklin street.

Hospital for the Women of Maryland, John street and Lafayette avenue.

Nursery and Child's Hospital, Schroeder and Mulberry streets.

Robert Garrett Free Hospital for Children, 27 North Carey street.

Hospital for Consumptives of Maryland, Hoffman street and Park avenue.

Hospital for the Relief of Crippled and Deformed Children, 2000 North Charles street.

Maryland Hospital for the Insane, Catonsville, Md.

Mt. Hope Retreat for the Insane, Mt. Hope, Md.

St. Agnes Hospital, Caton and Wilkins avenues.

Second Hospital for the Insane of Maryland, Springfield, Md.

FRIDAY, APRIL 28.

Hospital for the Relief of Crippled and Deformed Children,

2000 North Charles Street.

10 A. M.—Demonstration of Orthopedic Cases and Methods of Treatment. Dr. R. T. Taylor.

12 M.—Visit to the Sheppard and Enoch Pratt Hospital at Towson. Luncheon from 1.30 to 3 P. M. Take York Road electric cars.

8 P. M.—Business Meeting.

In the corridors of McCoy Hall and in the Donovan Room there will be a series of most interesting exhibits:

(a) Portraits of distinguished deceased physicians of Maryland.

(b) Diplomas and relics, etc.

(c) In the Donovan Room a literary and pictorial representation of the chief epochs in medicine.

(d) A collection of relics illustrating the text-books and literature of the year of the founding of the Faculty, 1799.

(e) A collection of the published works of the medical profession of Maryland.

(f) A collection of works illustrating the development of art in medicine.

The large drug houses and publishing firms have signified their intention of making important exhibits of pharmaceutical preparations and the recent published works.

GENERAL NOTICES.

The Secretary's Office will be found in the corridor of McCoy Hall. This office will be open on Tuesday afternoon at 4 o'clock, and on each succeeding day from 9 A. M.

Members are requested to register their names and addresses at once, and to pay their Annual Dues, and to ask for cards of invitation to the lunches, etc.

APPLICATIONS FOR MEMBERSHIP.

At the Secretary's desk will be found Applications for Membership, which may be signed by members of the profession in the State and City in good standing, and upon payment of the initiation fee of Five Dollars the Examining Board will pass upon the Candidate, and he will be admitted to membership during the present session.

Visiting physicians from outside the City and State will, on registering, receive the invitations to the lunches, etc.

RAILROAD AND STEAMBOAT LINES.

Baltimore & Ohio Railroad, Pennsylvania, Delaware and Maryland.

Philadelphia & Reading Railroad, from Reading Terminal, Reading or Harrisburg.

Western Maryland Railroad.

Northern Central Railroad, Pennsylvania, Delaware and Maryland.

Baltimore, Chesapeake & Atlantic Railroad Co.

Weems' Steamboat Co.

Lehigh Valley Railroad, Pennsylvania, Delaware and Maryland.

Baltimore & Lehigh Railroad.

All the above-mentioned Railroads and Steamboat Lines will reduce fares to about one and one-third for round trip. Address Dr. J. D. Iglehart, 1214 Linden Avenue, Baltimore, Md.

BUREAU OF INFORMATION.

Members and visitors wishing information about any of the details of the programme or receptions and entertainments will apply at the Bureau of Information at the Secretary's Office.

ANNUAL DINNER OF THE FACULTY.

The Annual Dinner of the members of the Faculty will be held at the Hotel Renner on Thursday evening at 7 o'clock. Tickets, \$5.00. Members wishing to subscribe must hand in their names at the Secretary's Office not later than 12 o'clock on Wednesday, after which hour no applications can be received.

Ladies of the families of members and guests are cordially invited to be present at the address of the President on Tuesday evening, and the reception following, and also at the address of Prof. W. W. Keen on Wednesday evening.

Medical Progress.

PHYSICIAN TO THE POPE.—A writer in the Pall Mall Gazette says: "I do not wish the position of doctor to the Pope for my worst enemy when the august patient is not well. His house—doctors to the Pope do not live in the Vatican—is no longer his own, but public property, for there is a continual coming and going of prelates, messengers from all kinds of personages, and journalists. However, the worst hours are those of the night. The doctor, to be sure of hearing any call from the Vatican, has the telephone at the head of his bed, and when sinister rumors circulate cardinals and diplomats seem to consider it their duty or privilege to ring him up at all hours of the night.

"And that is not all. Besides the inconvenience, there is also considerable expense, as many telegrams requiring an-

swers arrive for him, a great portion of which he cannot ignore, because of the station of the senders. No one would certainly ever guess what salary the papal doctor draws: it is only £120 (\$600) a year!

"At the Vatican everything is maintained unchanged as it was several centuries ago, and the stipend of the doctor remains fixed at fifty scudi (\$50) a month, with the difference that what was formerly equivalent to a good, round sum is now of very small value. The only other advantage which he has is a carriage to convey him to and from the Vatican.

"The present doctor, Professor Guiseppe Lapponi, has held his position since 1888. At that date Leo XIII, having been left with only a surgeon, and the need of a doctor being much felt, Professor Lapponi, who was practicing at Osimo, on the Adriatic side of the peninsula, came every week to Rome to visit him. Shortly after the surgeon died, and the professor became and has remained the only physician of His Holiness. He has gradually so gained his confidence and friendship as to be to him what Dr. Schweninger was to Prince Bismarck.

"Dr. Lapponi is the only person who succeeds in overcoming the natural obstinacy of Leo XIII to take certain precautions, to which he shows great repugnance. In fact, the regime established for the daily life of the Pontiff has such fixed rules that his life may be compared to a chronometer. There are, however, habits which the persistence of the doctor has not succeeded in eradicating. Only today Professor Lapponi told me that His Holiness still persisted in mounting a chair in the library to get down the books himself, and when remonstrated with over the danger even to a younger person he replies: 'I know the way; I know the way.' Then he will not give up mental labor. During the last few days that he has been in bed he has composed verses, worked with his private secretary, Mgr. Angell, and received Cardinal Rampolla every morning to discuss State affairs, and all this just a little more than one month before his ninetieth birthday."

THE CHEMISTRY OF SAUSAGES.—The composition of the sausage, says the *Lancet*, is not only complex, but it is often obscure. In England the preparation of this (as it should be) useful article of food is confined to the employment of minced beef and pork. The only exception, probably, is the so-called "black pudding," which is made with pig's blood and perhaps some heart and kidney. Abroad, however, the sausage is compounded of a much wider range of substances. These include brains, liver and horseflesh. The last substance is generally considered repugnant, while, of course, it is fraudulent to sell sausage as beef or pork containing horseflesh. Occasionally, however, sausages do not contain meat at all, but only bread tinged with red oxide of iron and mixed with a varying proportion of fat. The remarkable feature of horseflesh is the high proportion of glycogen which it contains, and this fact enables the presence of horseflesh to be detected with some amount of certainty. The test, which depends on a color reaction with iodine, has recently been more carefully studied and with more satisfactory results, so that the presence of 5 per cent. of horseflesh in sausages can be detected. At present there is no legal provision for a standard in regard to the composition of sausages, but clearly there ought to be. Limitations should be laid down as to the amount of bread used, as to the actual proportion of meat substances present and as to the coloring matters added to give an attractive appearance of fresh meat. Sausages are extremely liable to undergo decomposition and become poisonous owing to the elaboration of toxic substances during the putrefactive process. Bad or rancid fat is very liable to alter the character of a sausage for the worse. Thus in some instances the use of bad or rancid lard has rendered the sausage after a time quite phosphorescent, an appearance which indicates, of course, an undesirable change. The smoked sausage is a much safer article of diet than the unsmoked sausage, since the curing process preserves the meat substances against decomposition by reason of the empyreumatic bodies present

in the wood smoke which is used for this purpose.

* * *

THE POWER OF ABSORPTION IN CHILDHOOD.—W. Jakubowitsch (*British Medical Journal*) reports the results of a series of experiments made with the view of determining the conditions which influence the process of absorption in children. He arrives at the following conclusions: 1. If food, either in a solid or in a liquid form, be introduced into the stomach immediately after the latter had been carefully washed out, the result is that absorption from the mucous surface of that organ takes place, contrary to general expectation, far less vigorously than before the stomach had been subjected to this treatment. 2. During the existence of a high temperature, either of a continued or intermittent character, the absorbent power of the stomach and rectum is considerably retarded. 3. The age of the child, as such, does not in any way, either at a normal or at an elevated temperature, influence the process by which absorption from the mucous membrane ensures. There is, however, at least one exception to this statement. Clinically it had often been proved that during the period of suckling, absorption, and especially from the rectum, varying, of course, with each individual child, is on the whole much slower than at a somewhat more advanced age, say, after one year and one-half, and it has more than once been ascertained that at the age of from two to five years no mucous membrane of the body is so susceptible to quick absorption as that of the rectum. 4. It is noteworthy that with the approach of death absorption from the rectum is absolutely *nil*, a fact which might aid in forming the prognosis of a given case. 5. The author has convinced himself that solutions of iodide of potassium applied to the skin are not absorbed, provided, of course, that the latter is in a normal uninjured condition.

* * *

COD-LIVER OIL AND JUICE SECRETION.—Wirshillo (*International Medical Magazine*) has made a number of experiments with a view to determine the character of the gastric juice when various

quantities of cod-liver oil have been added to the food. The experiments, fifteen in number, were made on children free from any gastro-intestinal disturbance. No change in the mode of life was made. Each investigation was divided into two parts: (1) A test breakfast, consisting of 200 to 400 grms. of milk, was given, and the stomach contents analyzed in one and one-half and two and one-half hours; (2) the same test breakfast, with eight grms. of cod-liver oil. The analysis of the stomach contents covered the following points: 1, total acidity; 2, amount of HCl (free and combined), and, 3, the digestive power. Phenolphthalein and Töpfer's method were used as indicators. The digestive power was determined by the method of Metta. As a result of these investigations the following conclusions were reached: 1. Cod-liver oil diminishes the amount of HCl and pepsin, the latter being more affected in the beginning of digestion. 2. The disturbing effect on the gastric juice is especially marked at the beginning of digestion. 3. The secretion of the gastric glands, though weakened by the oil, lasts longer than usual. The author then concludes that, in view of these objectionable features of cod-liver oil, we should, by further experimentation, find another oil equally efficacious, but not injurious to digestion.

* * *

TREATMENT OF SCARLATINA.—Knöspel, in the American Journal of Obstetrics, has studied 158 cases, of which 24 per cent. died. The material comprised twenty-four mild, 116 moderately severe and eighteen very severe cases. Nephritis occurred twenty-six times. Angina necroticans occurred in forty-six cases, and the treatment employed was intratonsillar injections of carbolic acid. The method proved of value in checking the necrotic process, and apparently does not cause kidney complications. Hydrotherapy was employed in the form of cold sponging, cold compresses, cold packs and baths of varying temperature, thirty cases being so treated. Nephritis occurred in only five of these, so that the use of cold water did not increase the predisposition to kidney complications.

Nor has the author been able to verify the statement that milk diet prevents nephritis, which may occur in mild cases and as late as the thirty-fifth day of the disease. Two cases were observed which ran an afebrile course, and another case had no exanthem. One case of surgical scarlatina followed four days after an operation for double inguinal hernia in a boy of four years, who recovered.

* * *

CODDLING CHILDREN AND COLDS.—Coddling under any circumstances is usually a mistake. Pediatrics says that the treatment of tuberculosis by fresh air and good diet is now thoroughly recognized as the most beneficial one, and everywhere sanitariums conducted on these principles are springing up. But it should be remembered that if proper care is taken of children when young that there would not be the need of sanitariums there now is, as in many instances the seeds of consumption can be eradicated by judicious bringing up. It is a fact, both instructive and interesting, that in many of the coldest portions of the globe colds are unknown. Nansen and his men when in the Arctic regions, although they underwent exposure of every description, never suffered from colds, but no sooner had they set foot on their native shore of Norway than they one and all caught cold. The experience of other Arctic explorers is the same. It seems, then, probable that, after all, there is something in the theory that colds are infectious.

* * *

HOW TO GIVE COD-LIVER OIL.—Dr. W. Fowler gives in the Georgia Journal of Medicine and Surgery his method of taking cod-liver oil and creosote. He says: "When I tell you that I am a cod-liver oil and creosote drinker of over seven years' standing I am sure you will pardon my dogmatic language when I say that the best and most palatable way to take these drugs is as follows: Pour two drachms of cod-liver oil on an ounce and one-half of water, then add the required amount of creosote slowly drop by drop on different parts of the surface of the oil."

MARYLAND Medical + Journal.

PUBLISHED WEEKLY.

TERMS OF SUBSCRIPTION, \$3.00 a year, payable in advance, including postage for the United States, Canada and Mexico. Subscriptions may begin with any date.

DATE OF PAYMENT.—The date following the subscriber's name on the label shows the time to which payment has been made. Subscribers are earnestly requested to avoid arrearages.

CHANGES OF ADDRESS.—When a change of address is ordered, both the old and new address must be given. Notice should be sent a week in advance of the change desired.

TO CORRESPONDENTS.—Original articles are solicited from members of the profession throughout the world. Reprints will be furnished at cost of production if the author's wish is so stated.

CORRESPONDENCE upon subjects of general or special interest, prompt intelligence of local matters of interest to the profession, items of news, etc., are respectfully solicited. Marked copies of other publications sent us should bear the notice "marked copy" on wrapper.

MARYLAND MEDICAL JOURNAL,
Fidelity Building, Charles and Lexington Streets.
BALTIMORE, MD.

WASHINGTON OFFICE:
Washington Loan and Trust Company Building.

BALTIMORE, APRIL 22, 1899.

SOME time ago the *Boston Medical and Surgical Journal* called attention to the remarks by

Dr. Thomas Dwight of Harvard

Too Many Professors. University on the multiplication of professors. It is undoubtedly

true that the increase in the number of medical schools is caused in part by the desire of some men, totally unfit, to wear the title of professor. This is in strong contradistinction to the modest and worthy men who have earned titles abundantly and who much prefer the simple "Dr." or "Mr." There are other elements contributing to the multiplication of professors, and another is the desire not only to be called professor, but the ambition to be at the head of some branch in however mediocre a school and to be, as it were, a "king among cats."

This increase in the number of schools is not healthy, and it certainly has not helped the cause of medical education in many cities. Already now schools are making little or no money, and for several years past the talk of consolidation of some of the Baltimore schools has been quietly going on. One great obstacle to this proposed consolidation is the fact that some of the present professors would be obliged to drop that high-sounding title and step back among the insignificant doctors. As

it is, it is doubtful if any of the schools are making more than enough to meet their expenses, and it is an open secret that in more than one school the professor pays for the privilege of his exalted position. A consolidation of two or more of the most prominent schools and putting the affairs of this reorganized body in the hands of a board of trustees would certainly help medical education.

It would seem fair also that the men teaching such practical branches as the practice of medicine and surgery, eye and ear, throat and chest, etc., and who, by virtue of their positions, gain a large practice outside of the hospital, should serve for a smaller stipend than the professors who teach chemistry, anatomy, physiology, branches which can attract no practice. Also it seems hardly just to the students that anatomy and physiology are taught by men in active practice who can give little time to the preparation of their work. Such men should be on a fixed salary and devote their whole time to their work of teaching and to its preparation.

These are facts which may sound radical, but which the schools of Baltimore at least and of many other places will find must be considered if the desire is to keep the schools together and attract a large number of students.

* * *

THE invitations and the programme of the centennial of the Faculty have been sent out, and everyone will notice the large amount of interesting matter there presented to the profession.

There is one committee which should render very useful work, and that is the reception and hospitality committee. In former years it has been noticed that many physicians from outside of the city came to the Faculty meeting and felt timid because they knew very few of the city members, and probably their few acquaintances happened not to be present to greet them. It should be the duty of this committee to unhesitatingly greet each person who looks like a stranger, and, by introductions, make each one feel at home. A little cordiality at such meetings makes things move very smoothly.

Physicians from out of the city will find the theaters and other places of amusement as a diversion should they not care for the receptions, and in the day they will have many opportunities to take long trolley rides.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending April 15, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	..	..
La Grippe.....	..	4
Pneumonia.....	..	28
Phthisis Pulmonalis.....	1	20
Measles.....	13	..
Whooping Cough.....	6	..
Pseudo-Membranous Croup and Diphtheria. }	18	3
Mumps.....	1	..
Scarlet Fever.....	11	1
Varioloid.....	..	..
Varicella.....	2	..
Typhoid Fever.....	8	2

At the commencement of the University of Maryland, held last Thursday, forty-seven candidates received the degree of M.D.

At the commencement of the College of Physicians and Surgeons the degree of doctor of medicine was conferred on thirty-seven candidates.

Once more the daily papers announce a discovery, and this time it is that Dr. William J. Class of the Chicago Health Department has discovered the specific organism of scarlet fever.

Dr. R. K. Compton, one of the most prominent physicians of Charles county, Maryland, died at his home in Pomonkey last week aged seventy-one years. Dr. Compton received his medical degree about fifty years ago and had spent his whole life in his native county.

The Fort Stanton abandoned military reservation in New Mexico, containing 10,240 acres, and the buildings thereon, has been reserved and set apart by the United States government for the use of the Marine Hospital Service for the treatment of cases of tuberculosis.

Dr. Osler states that so far only 137 members of the Faculty have subscribed to the Centennial Fund. The expenses of the centennial entertainment will be quite heavy, and no doubt a number of those who had intended to subscribe have overlooked the notice.

Through the liberality of Mr. B. F. Newcomer of Baltimore the Hospital for Consumptives of Maryland has received \$10,000 with

which to buy a site and building in the country. The patients will be moved to the country as soon as certain formalities have been complied with and the building has been prepared for the cases.

The faculty of the College of Physicians and Surgeons has announced the appointments of the following hospital physicians for the next year, taking effect May 1: City Hospital—Dr. Herman Westphal, resident; Dr. N. Garland Keirle, Jr., first assistant; Dr. Edward V. Murphy, second assistant; Dr. Harry Hubbard, third assistant; Dr. Elton Smith Osborne, fourth assistant. Maryland Lying-In Hospital—Dr. W. J. Leahy, resident; Dr. W. D. Harris, assistant. Bayview Asylum—Dr. Ernest A. Knorr and Dr. H. G. Simpers, assistants.

The corner-stone of the Mary Washington Hospital was laid in Fredericksburg with especially interesting ceremonies. Fredericksburg was the home of Mary Washington. The architect who drew and donated the plans is George Washington Smith; the superintendent of the building is George Washington Wroten, and the corner-stone is a piece of the uncompleted monument to Mary Washington. It is interesting to record that April 14, 1789, George Washington received the notice of his election as first President of the United States, and he rode to Fredericksburg to tell his mother of this honor. The hospital building will be a frame structure, with a capacity of twelve to sixteen beds. While it is not intended as a charity institution, it will have some free beds.

Changes and reappointments in the staff of the Maryland University Hospital, Lombard and Greene streets, have been made as follows: Dr. St. Clair Spruill, reappointed superintendent of hospital; Dr. H. M. Fitzhugh, appointed assistant superintendent in place of Dr. J. A. W. Holland, resigned; Drs. H. M. Tucker, Henry W. Kennard, J. R. Shook and H. C. Solter, appointed resident surgeons; Drs. A. J. Edwards and E. J. Nixon, appointed resident physicians; resident gynecologists, Drs. R. S. Blackburn and C. B. Snyder; resident microscopist, Dr. S. P. Latane; ambulance surgeon, Dr. G. H. Steuart. In the Maternité Hospital of the University of Maryland Dr. L. M. Allen has been retained as resident physician and chief of obstetrical clinic, and Drs. Mills and Heilig, assistant resident physicians.

Washington Notes.

Acting Assistant Surgeon H. L. Coffin will proceed to Jefferson Barracks, Mo., to accompany Light Battery E, First U. S. Artillery, to the Philippine Islands.

Major John R. McDill, brigade surgeon, U. S. V., has been relieved from further duty in Havana, Cuba, and is ordered to this city to report to the surgeon-general.

Captain D. C. Howard, assistant surgeon, has been detailed for temporary duty as attending surgeon, New York city, relieving Major N. S. Jarvis, brigade surgeon U. S. V.

Dr. Wm. B. French has been appointed special inspector to look after the cases of cerebro-spinal meningitis, and Dr. Lewis J. Battle has been appointed smallpox inspector.

Deaths from cerebro-spinal meningitis are being reported daily. Three were reported Monday afternoon, making a total of fifty-two deaths from this disease during the past six weeks.

New cases of smallpox are again being reported in numbers. The disease has now a foothold in the northwestern section of the city. There are twenty-four cases at the smallpox hospital and fifteen premises quarantined.

Judge Kimble, at the request of the District Commissioners, has designated the Smallpox Detention Hospital as a place for confining persons who have been arrested and who are believed to be unsafe to the inmates of the police stations, workhouse or jail.

At the Medical Society Wednesday evening the following was the programme: Dr. Du-four—"Influenza Otitis;" Dr. J. Preston Miller—"Preparing for the Knife in European Hospitals;" Dr. J. Ford Thompson—"Case of Abdominal Hysterectomy, with Specimen;" Dr. Moran—"Gumma of the Brain, Case and Specimen."

Army orders as follows: Capt. D. C. Howard, assistant surgeon, ordered to duty at Savannah, Ga.; Acting Assistant Surgeons C. N. Barney and Fred Pearl assigned to duty at San Francisco; Acting Assistant Surgeon L. T. Griffiths is ordered to Fort Preble, Me. To the Philippine Islands, Acting Assistant Surgeons H. E. Stafford, to accompany Thirteenth Infantry; W. P. Banta, to accompany Battery A, Sixth Artillery; Robert F. Jones and E. F. Robinson, to accompany a battery of the Fourth Artillery.

Book Reviews.

THE PRINCIPLES AND PRACTICE OF MEDICINE. Designed for the Use of Practitioners and Students of Medicine. By William Osler, M.D., Fellow of the Royal Society; Fellow of the Royal College of Physicians, London; Professor of Medicine in the Johns Hopkins University, and Physician-in-Chief to the Johns Hopkins Hospital, Baltimore; etc., etc. Third edition, entirely revised and enlarged. Sold only by subscription. Price—cloth, \$5.50; sheep, \$6.50; half-morocco, \$7. New York: D. Appleton & Co.

This edition has been thoroughly revised and much of it has been rewritten, and yet the number of pages has been very slightly increased, but the pages are a little larger. The work has been revised in the most painstaking manner, and not only has the author's rich experience been used in every department, but he has searched the literature thoroughly. In the preface he gives a long list of articles that have been rewritten, and there is a second list of diseases, in the description of which much new matter has been incorporated.

One of the best articles in this remarkable work is the first on typhoid fever, a subject to which the author has given so much attention. He acknowledges that there are objections to too much reliance on the serum reaction in the diagnosis of typhoid fever. He admits that malarial and typhoid fever may be associated, but says that there is no such disease as typhomalarial fever as a separate and distinct malady.

It is impossible to review this whole book. While the author acknowledges assistance from certain specialists, he gives a complete product, evidently the work of one man. The descriptions of the diseases and the pathology leave nothing to be desired. The treatment is a little meager in places, but always reliable.

REPRINTS, ETC., RECEIVED.

Organothérapie ou Opothérapie par le Dr. C. Hillemand, Paris.

The Newer Preparations of Bismuth. By Reynold W. Wilcox, M.D. Reprint from the *Medical News*.

The Serum Treatment of Diphtheria. By William Cheatham, M.D. Reprint from the *American Practitioner and News*.

Three Cases of Obstruction of the Bowels by Omental Cords. By G. G. Eitel, M.D. Reprint from the *Northwestern Lancet*.

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BALTIMORE, APRIL 29, 1899.

Whole No. 944

A BRIEF SKETCH OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND, 1799-1899.

PRIOR to the founding of the Medical and Chirurgical Faculty of Maryland in 1799 there was, so far as we can ascertain, but one attempt ever made at society organization by the physicians of this State.

of which Dr. Charles Frederick Wiesen-
thal became president, and Dr. Frederick
Dalcho, secretary. The object of the
founders appears to have been principally
the suppression of quackery, which at



Engraved from drawing in possession of Maryland Historical Society.

BALTIMORE CITY IN 1799.

East view of Baltimore at the founding of the Medical and Chirurgical Faculty of Maryland. Drawn by G. Beck of Philadelphia. Engraved by Cartwright, London.

In the year 1788, as the result of agitation, traces of which appear in the newspapers for several years previous to that date, the physicians of Baltimore and vicinity met and founded an association,

that time prevailed without check throughout the country. They embraced the entire State in the plan of their operations, which in its features strikingly resembled that of the charter of the Medi-

cal and Chirurgical Faculty. Dr. Wiesenthal was well calculated to be the leader in such a movement. Born and educated in Germany, he had emigrated to America in 1755, settling in Baltimore, where his eminent talents, his rare professional acquirements and his high character soon placed him at the head of the profession of this section. Unfortunately he died within six months, whereupon discord arose among the members and the society was dissolved. An attempt was made at this time to engraft upon the society a medical college, but the latter shared a like fate, although some courses of lectures were delivered by Drs. George Buchanan and Andrew Wiesenthal (the latter a son of the one already mentioned), who settled in Baltimore about the middle of 1799, fresh from the halls of Edinburgh and ambitious for the distinction of professorship and public office.

Although this effort proved abortive, the seed had been sown, and it continued to germinate in the minds of the profession during the succeeding decade, until it ripened into the charter of the Medical and Chirurgical Faculty passed by the legislature of the State at its November session, 1798. The act, which received the signature of the governor on the 20th January, 1799, and thereby became a law of the land, was not passed without opposition. It would be interesting to know the details connected with its authorship and passage, to pry into the offices of the old doctors as they conferred together over this document of such far-reaching significance to them and their successors, to know who were those who labored for its adoption and what was said and done upon the occasion. But these, as well as many other events connected with those early days, are hidden from us forever, and we can only picture them to ourselves in imagination.

The objects of the charter are succinctly outlined in the preamble, which reads as follows:

"Whereas, It appears to the general assembly of Maryland that the establishment and incorporation of a Medical and Chirurgical Faculty or Society of Phy-

sicians and Surgeons in the said State will be attended with the most beneficial and salutary consequences by promoting and disseminating medical and chirurgical knowledge throughout the State, and may in future prevent the citizens thereof from risking their lives in the hands of ignorant practitioners or pretenders to the healing art; therefore," etc. And again: "Such purposes as they may adjudge most conducive to the promoting and disseminating medical and surgical knowledge or to alleviating the calamities and miseries of their fellow-citizens."

What more noble object could any body of men contemplate and propose to themselves than that embodied in the foregoing words! What nobler destiny could those grand old forefathers of ours assign to us than this—the care and protection of the health and lives of our fellow-citizens! May we in our day and generation prove worthy of such a trust and transmit it to our successors without a blot or blemish!

Among the provisions of the charter are the appointment of a "Medical Board of Examiners" for the examination and license of those desiring to practice in the State, seven of whom shall be residents of the Western and five of the Eastern Shore, \$10 being paid for every such license; that no person shall hereafter be allowed to practice in the State without such license under penalty of \$50 for each offense; the usual authority is granted to make by-laws, seal, etc., and, finally, perpetuity is given to the institution by declaring it "one community, corporation and body politic forever." The names of 101 physicians, representing each of the nineteen counties into which the State was then divided and the cities of Baltimore and Annapolis, are named as founders, with authority to transmit membership to others, thus providing for due succession. The names of these founders, arranged alphabetically, are as follows:

Alexander, Ashton, Baltimore.
Anderson, James, Montgomery county.
Anderson, James Moat, Jr., Kent county.
Archer, John, Harford county.
Archer, Thomas, Harford county.
Baker, William, Prince George's county.

RECORD OF THE FIRST MEETING.

[From the *Federal Gazette*, Saturday, June 15th.]

At a general meeting of the Medical and Chirurgical Faculty of Maryland, convened at the city of Annapolis on the first Monday in June, 1799:

Ordered, that the secretary have published in some of the most public newspapers of the State of Maryland an abstract of the proceedings of this meeting, so far as relates to the appointment of the officers of the Faculty; the Medical Board of Examiners for each Shore, and such of the by-laws, rules and regulations as relate to the time and places of meeting of the State Boards of Examination, with the time and places appointed for the general meeting of the Faculty.

1. The Faculty shall convene at the city of Annapolis, the first Monday in June, eighteen hundred and one, and every second year thereafter.

4. The Board of Examiners for each Shore shall, and they are hereby directed, to meet annually. The Board of Examination for the Western Shore shall meet at the city of Annapolis the first Monday in June, and the Board for the Eastern Shore at the town of Easton the second Monday in April, annually, for the purpose of examining and granting certificates to applicants who are desirous to practice medicine and surgery within this State. Any two members of the Boards of Examination, respectively, are authorized to call a special meeting of their board whenever they may think it expedient.

12. The President of the Faculty shall be, and he is hereby empowered to call a special meeting of the Faculty at any time intervening the periods fixed for the established meetings, whenever he may judge that the interest of the Faculty requires it, of which two months' notice shall be given in some of the most public newspapers of the two Shores.

By order,

ASHTON ALEXANDER.

Secretary to the Faculty.

Beans, William, Jr., Prince George's county.
Beatty, Charles A., Montgomery county.
Birckhead, Thomas H., Harford county.
Brown, Gustavus, St. Mary's county.
Brown, Gustavus Richard, Charles county.
Brown, Morgan, Jr., Kent county.
Bourne, Thomas, Calvert county.

Buchanan, George, Baltimore.
Clagett, Zachariah, Washington county.
Cradock, Thomas, Baltimore county.
Cromwell, John, Baltimore county.
Davidson, James, Queen Anne's county.
Davis, Elijah, Harford county.
Downes, Jesse, Caroline county.
Duckett, Richard L., Prince George's county.
Elzey, Arnold, Somerset county.
Forbes, James, Allegany county.
Fossett, Thomas, Worcester county.
Gantt, Edward, Montgomery county.
Geddes, Robert, Kent county.
Ghiselin, Reverdy, Annapolis.
Goldsborough, Howes, Dorchester county.
Goldsborough, Robert, Queen Anne's county.
Goodwin, Lyde, Baltimore.
Gray, James, Calvert county.
Groome, John, Cecil county.
Hall, Joseph, Montgomery county.
Harrison, Elisha, Cecil county.
Haynie, Ezekiel, Somerset county.
Hays, William, Dorchester county.
Helm, Henry, Caroline county.
Hilleary, William, Frederick county.
Hopkins, Richard, Anne Arundel county.
Huston, John, Worcester county.
Ireland, Joseph, Calvert county.
Irwin, Levin, Somerset county.
Jackson, Elijah, St. Mary's county.
Jenifer, Daniel, Charles county.
Johnson, Stephen Theodore, Talbot county.
Jones, Mathias, Somerset county.
Keene, William B., Caroline county.
King, John, Cecil county.
Lansdale, William, St. Mary's county.
Love, Thomas, Baltimore county.
Lynn, George, Allegany county.
Magruder, Zadok, Jr., Montgomery county.
Marshall, William, Prince George's county.
Martin, Ennalls, Talbot county.
Miller, William, Cecil county.
Mitchell, Abraham, Cecil county.
Murray, James, Annapolis.
Murray, William, Anne Arundel county.
Moore, Daniel, Baltimore.
Morrow, Benjamin, Allegany county.
Neill, John, Worcester county.
Noel, Perry Eccleston, Talbot county.
Parnham, John, Charles county.
Parran, Thomas, Calvert county.
Pindell, Richard, Washington county.
Pottinger, Robert, Prince George's county.
Price, Joseph, Caroline county.
Pue, Arthur, Baltimore.



Engraved from tinted photograph in possession of
Medical and Chirurgical Faculty.

UPTON SCOTT, M.D.,
of Annapolis.
1719—1811.

First President of the Medical and Chirurgical
Faculty of Maryland. Received his diploma in
Glasgow, 1753.

Purnell, Geo. Washington, Worcester county.
Purnell, John, Worcester county.
Rawlings, Daniel, Calvert county.
Roach, William H., St. Mary's county.
Sappington, Francis Brown, Frederick county.
Schnively, Jacob, Washington county.
Scott, Edward, Kent county.
Scott, Upton, Annapolis.
Shaaff, John Thomas, Annapolis.
Smith, Jos. Sim, Frederick county.
Stevenson, Henry, Baltimore.
Stockett, Thos. Noble, Anne Arundel county.
Sullivan, James, Dorchester county.
Tabbs, Barton, St. Mary's county.
Thomas, John, Queen Anne's county.
Thomas, Philip, Frederick county.
Thomas, Tristram, Talbot county.
Thompson, Saml., Queen Anne's county.
Todd, Christopher, Baltimore county.
Trapnall, Philip, Baltimore county.
Tyler, John, Frederick county.
Waltz, Peter, Washington county.
Warfield, Chas. Alex., Anne Arundel county.
Waters, Wilson, Anne Arundel county.
Wells, John, Queen Anne's county.

White, Edward, Dorchester county.
Woolford, John, Somerset county.
Wood, Gerard, Charles county.
Worrell, Edward, Kent county.
Worthington, Chas., Montgomery county.
Wyville, Dorsey, Dorchester county.
Young, John, Jr., Caroline county.
Young, Samuel, Washington county.

These names represent not only the pick of the Maryland profession, but the highest types of physicians to be found anywhere—men trained at the Universities of Edinburgh, Glasgow, Dublin, Leyden, Paris, Philadelphia and the cities of Germany; pupils of Cullen, Boerhave, the Hunters, Munro, Bell and Rush. They were not only erudite in the knowledge of medicine as it was then understood and taught, but most, if not all, of them were fine, classical scholars, accustomed to the use of Latin especially, which was then the universal language of scholars.

The records of the first half-century of the Faculty's history are sadly deficient. The manuscript records are completely wanting. With the exception of a very brief "Summary" of the first eight years,



Engraved from painting in possession of Mr.
Douglas H. Thomas.

ASHTON ALEXANDER, M.D.,
of Baltimore.
1772—1855.

First Secretary and last surviving charter member
of the Medical and Chirurgical Faculty of
Maryland.



Engraved from portrait in possession of Lottie Carroll Cradock, Pikesville.

HENRY STEVENSON, M.D.,
of Baltimore.
1721-1814.

In 1765 was styled "the most successful inoculator in America," and went to the counties to practice inoculation upon the people. In 1768 he converted his own house, near present site city jail, into an inoculating hospital, and continued the practice until the introduction of vaccination.

a list of members of the year 1848 and an occasional annual address we have only the brief references of the medical journals and newspapers. From such sources we learn that up to 1839 the society devoted itself almost exclusively to its executive duties—the examination and license of physicians and the suppression of irregular practice. But little attempt was made to render the meetings "scientific." The presidents held office each for an indefinite period—several years—and "presidential addresses" were not, therefore, an annual event as now. The more stately "oration," with its resources of classical and medieval erudition, was more in accord with the spirit of the times, and one, sometimes two, of these constituted the leading event of the regular biennial meetings. Among those who are recorded as having been "orators" in these early times are Richard Wilmot Hall, Patrick Macaulay, John B. Dav-

idge, John Crawford and Nathan R. Smith. An essay on "Epidemic Fever in Talbot and Queen Anne's Counties, 1813-14," read by Dr. Ennalls Martin in 1815, also two prize papers on "Cholera Infantum" and "Malaria" by Drs. Samuel A. Cartwright and Charles Caldwell, respectively, deserve mention here.

The necessity of providing some systematic instruction for the increasing number of medical students in the State begins early to claim attention. At the second biennial meeting held in Annapolis in 1801 a plan was proposed by a "distinguished" member of the society (whose name, however, remains unknown*), and which then received the approval of Dr. Upton Scott, the first president. It was proposed to found a "College of Physicians" which should embrace the duties of the medical examiners, with such "other executive powers under the law as should appear to be necessary to give it added respectability." Owing to the scant attendance action upon the proposal was deferred until the following year.

At the special meeting held at the same place the following year the subject was again brought up and its adoption urged in his address by the president, Dr. Philip Thomas of Frederick, who thought it would require additional authority from the legislature. He takes occasion to rebuke the lax methods of admission of the Examining Board, whose mild indulgence had already subjected the society to much censure. Their expectation that the candidates, who had already had the advantage of one session at the Philadelphia College of Medicine, would make up their deficiencies after admission had in some cases not been realized. The necessity of further legislation led to continued delay, and the matter was left in the hands of a committee of which Drs. Davidge and Brown were members.

Five years later a bill was framed and

*We may perhaps safely conjecture that the author of this plan was Dr. Davidge, for we learn from Dr. Potter that he had entertained the idea of founding a medical school ever since his settlement in Baltimore in 1780, and they had frequently conversed together upon the subject. Davidge had also at that time probably the largest class of private students in Baltimore.

passed through the legislature founding the College of Medicine of Maryland, which was the direct creation of the society. An examination of the charter of this institution will show the close relations contemplated between the two bodies. The third section enacts "that the members of the Board of Medical Examiners for this State for the time being, together with the president and the professors of the said college and their successors, shall be, and are hereby declared to be, one community, corporation and body politic, to have continuance forever by the name of the Regents of the College of Medicine of Maryland." The regents and their successors are empowered "to receive and hold property, both real and personal, and to dispose of the same at pleasure, to sue and be sued, and to do all and every other matter and thing in as full and effectual a manner as any other person or persons, body politic or corporate, in like cases may or can do."

They are empowered to appoint professors for the different branches, and also lecturers upon the sciences connected with medicine, these incumbents to constitute jointly the faculty of the college. Every licentiate of the Board of Examiners who shall have practiced five years within the State shall be entitled to a surgeon's certificate from the college. The degrees of bachelor and doctor of medicine are to be obtained after one or two years' attendance, respectively, an examination which is to be both private and public, and the writing of a thesis. The eighteenth section enacts "that the Medical and Chirurgical Faculty in the State of Maryland shall be considered as the patrons and visitors of the said college, and their president for the time being shall be chancellor of the college, and the medical faculty of the said college shall give into the said Medical and Chirurgical Faculty, at each of their biennial meetings, a report of the progress of learning in the said college and of such other particulars as they may think fit to communicate."

This law, drafted by Dr. Shaw of Annapolis, was adopted on the 18th of December, 1807, a portion of the course having already been put in operation.



Engraved from picture in possession of Lottie Carroll Cradock, Pikeville.

Home of Dr. Henry Stevenson ["Parnassus"] in the suburbs of Baltimore, in which, in 1768, the owner established an inoculating hospital and supported it with his own means. From this circumstance it was known as "Stevenson's Folly." This was thirty years before Jenner's great discovery was given to the world. It was at this period that Dr. Stevenson's heroic and self-sacrificing work was begun.

The first members of the Faculty named in the act were "John B. Davidge, M.D., and James Cocke, M.D., joint professors of anatomy, surgery and physiology; George Brown, M.D., professor of the practice and theory of medicine; John Shaw, M.D., professor of chemistry; Thos. E. Bond, M.D., professor of materia medica, and William Donaldson, M.D., professor of the institutes of medicine."*

Upon perusal of the above features it will be seen that a very close relationship existed between the society and the college, and that the latter was dependent upon the former and under its control, since the Board of Examiners, twelve in number, constituted a majority of the regents. It is interesting also to note that these relations were permanent, and that

*Three of these gentlemen, viz: Shaw, Bond and Donaldson, had not yet received the degree which was added to their names while the bill was being read before the house at the suggestion of a member who could not see the justice of applying it to some and omitting it with others.



Engraved from a pen sketch in possession of the Medical and Chirurgical Faculty.

BALTIMORE HOSPITAL.

The above view is of the old Baltimore Hospital for the Insane. The site is now occupied by the Johns Hopkins Hospital buildings.

the Medical and Chirurgical Faculty has never yielded up any of the rights and privileges granted it in this charter. It is quite true that the Faculty could at any time, if it were so disposed, reassert its claims to a management in the affairs of the college and legally enforce them. Such was the decision of the Court of Appeals of Maryland in the celebrated case of Regents of University of Maryland *vs.* Trustees, decided in 1839.*

The further history of the college is well known, at least to Maryland readers. The early classes were small; the

first year there were seven; the second, ten, and the third, eighteen. The first graduation, according to Dr. Potter, was in 1810, when there were five graduates; in 1811 there were ten. We do not know the names of these graduates, the class of 1812 being the first that has come down to us. Of one of these, Dr. Corbin Amos, a native of Harford county, Maryland, who practiced here through a long life, we have the diploma (it is hung in the faculty rooms of the University of Maryland), and this is the only diploma preserved of these early years and commemorating the existence of the "Collegium Medicinæ Terræ Mariæ." Other professors in this school during this period were Samuel Baker, Nathaniel Potter, Richard Wilmot Hall, Elisha De Butts and William Gibson. At first lectures were given at the residences of the professors; later an old schoolhouse on the corner of Fayette street and McClellan's alley was patched up and used, and for a time also a hall on Commerce street. On the 7th of May, 1812, the building on the corner of Lombard and Greene streets, then at the extreme western limits of the city, was begun, and it was so

*It is of interest to note that in 1807 Baltimore had a population of about 40,000, being the third city in size in the Union. Between 1790 and 1810 its growth in population and commerce was enormous, in proportion far exceeding that of New York and Philadelphia. Between 1790 and 1800 its population doubled; in the period from 1790 to 1810 it more than trebled, passing both Boston and Charleston, which had exceeded it at the former date. It was nearly half the size of New York and Philadelphia. In the 26 years ending 1816 the shipping of the port showed an increase of nearly 800 per cent. The population of the entire State in 1810 was 380,548, the increase since 1790 being greater in the city than in all the rest of the State. These facts showed that Baltimore, the last of the great Atlantic seaports to be founded, had developed since the beginning of the Revolution from an insignificant village into a great metropolis. Yet, when we compare the Baltimore of 1807 with the magnificent city of today, what a contrast!



Engraved from a print in possession of the Maryland Historical Society.

JOHN CRAWFORD, M.D.,
of Baltimore.
1746-1813.

First to introduce vaccination into America, in 1800.
Established the Baltimore General Dispensary.

far advanced during the ensuing session as to be partially tenatable by the Faculty. At the time it was considered a very fine building, and was, in fact, without an equal in the entire country.

The idea of engrafting a university upon the college seems to have been first entertained about the time the building was begun. Who suggested it we do not know, but we may suppose that Dr. Davidge was again the prime mover. There appears to have been no opposition whatever to it on the part of the Medical and Chirurgical Faculty; on the contrary it is said that the memorial praying for the passage of the act was presented to the legislature by the president and professors of the college, with the approval and by the advice of the Board of Regents. The act was passed on the 29th of December, 1812, and with it control of the institution passed forever from the hands of the society. The latter is not even alluded to in the act. There is no evidence of formal relinquishment of rights by the society, and I have already

stated the opinion of the Supreme Court to the effect that the second charter does not invalidate the first. In adding to the College of Medicine, which was regarded as the Faculty of Physic, other faculties or colleges of divinity, law and arts and sciences, the whole to constitute a university, the first-named does not lose its identity or continuity as the College of Medicine, but continues amenable to the charter of 1807. Practically, however, the two bodies severed their connection absolutely at this point. No attempt has ever been made to exercise any further authority under the original charter and none will ever be. Therefore the history of the college ceases to have any further interest in this connection, and I proceed to consider other subjects of interest.

Several supplements or amendments to the original charter of 1799 were passed from time to time strengthening it and making it more fully adapted to the pur-



Engraved from painting in possession of Dr. William H. Crim.

JAMES SMITH, M.D.,
of Baltimore.
1771-1841.

In 1802, with the approval of the Medical and Chirurgical Faculty, opened a vaccine institute at his house, No. 5 Calvert street, the first institution of its kind in America. In 1810 a "Vaccine" or "Jennerian Society" was organized in Baltimore. In 1813 Dr. Smith secured the establishment by Congress of a "National Vaccine Institute" in Baltimore.



Engraved from painting in possession of Medical and Chirurgical Faculty.

JOHN ARCHER, M.D.,
of Harford County.
1741-1810.

The first medical graduate in America. Diploma granted in 1768 by the College of Medicine of Philadelphia.

poses of its founders. Such were the acts of 1801, 1816, 1818 and 1821. I do not think it necessary or expedient to go into the details of these, which for those who wish to investigate the legal status of the society are readily accessible elsewhere.

At first there was, as might naturally have been expected, much evasion and disregard of the law. This led in 1802 to the appointment of censors, whose business it was to see that the law was not infringed by unlicensed practitioners and that its penalties were inflicted. They were also required to obtain lists of those practicing within their respective districts. There were two censors from each county and from the city of Annapolis and Fredericktown, one from Hagerstown and four from Baltimore. In 1805 it was deemed expedient to appoint six additional ones for the city of Baltimore. This plan of having censors was kept up for many years or whilst the Faculty was able to enforce its authority over the profession of the State. Doubtless in so difficult and disagreeable a rôle there

was often neglect, and the fear of giving offense to those who had authority, and the uncertainty as to the perpetuity of their privileges, seem to have rendered the members of this society less vigorous in their action than they should have been. In 1809 the case of one L. S. Rodrigues, practicing without authority in the city is reported, and Dr. Allender, in whose district the offense was committed, was ordered to proceed against him. "A's deportment," it is added, "has been liberal, forbearing and just towards R., who has refused to submit to examination." There seems to have been every disposition to leniency in dealing with such cases, but indulgence is often abused in such circumstances; the instances in which offenders were called to account were in striking contrast to the frequency of offenses.

Inoculation for the smallpox was still in vogue in Maryland at the close of the last century. Prominent among those who performed it during that period are Drs. Adam Thomson and Richard Brooke of Prince George's county, Dr. Henry Stevenson of Baltimore and Dr.



MORTAR AND PESTLE.

Formerly the property of Dr. John Archer of Harford county, the first medical graduate in America. In possession of the Medical and Chirurgical Faculty.



DIPLOMA OF DR. JOHN ARCHER.

Fac-simile reproduction of the first diploma granted by a medical college in America. Issued by the College of Medicine of Philadelphia in 1768 to Dr. John Archer of Harford county. Property of the Medical and Chirurgical Faculty.

Gustavus Richard Brown of Charles county. The first was the author of a tract on the subject, published by Benjamin Franklin, in Philadelphia, in 1750, which went through several editions. He was the originator of the "American method" and had a reputation throughout the colonies. Dr. Brooke published in 1752 a method of "Inoculation Without Incision." Dr. Stevenson in 1765 was styled "the most successful inoculator in America," and went to the counties to practice inoculation upon the people. In 1769 he established an inoculating hospital in his own house in the suburbs of Baltimore. In 1776 Dr. Gustavus R. Brown and Jas. Wallace opened an inoculating hospital for the citizens of Maryland and Virginia, near Port Tobacco, Md. During the Revolutionary War it was practiced extensively upon the soldiers. Smallpox was almost constantly epidemic in the State during this period, and the legislature had several times to remove to Baltimore on account of its prevalence in Annapolis. With the intro-

duction of vaccination into America by Dr. John Crawford of Baltimore in the summer of 1800 a new aspect of affairs was presented. The members of the Medical and Chirurgical Faculty early took a deep and active interest in the new method of prophylaxis. In 1801 (May 1) Dr. James Smith of Baltimore continued the practice of Dr. Crawford at the almshouse and among the citizens, and in 1802, with the approval of the Medical and Chirurgical Faculty, opened a vaccine institute at his house, No. 5 Calvert street, which was the first institution of the sort in America. A resolution of the society adopted this year declares "that the evidence of the great utility of the genuine vaccine inoculation is to them full and conclusive, and that they recommend it to their fellow-citizens to interest themselves in its propagation." April 25, 1803, Drs. Ennalls Martin, Robert Moore, Stephen Theodore Johnson and Tristran Thomas of Easton, all founders of the society, earnestly recommended the general practice

of vaccination. They were fully provided with genuine cowpox matter, and offered to inoculate the poor without fee or reward. "We shall think ourselves amply compensated by having their assistance," they say, "in extirpating a disease which has heretofore fell so peculiarly heavy on that numerous class."* A second endorsement by the Faculty was given in 1805. By the exertions of Dr. Smith and others, all prominent in the affairs of the society, a grant of a lottery was secured from the legislature in 1809 for the purpose of extending the operations of the institute, and in 1810 a "Vaccine" or "Jennerian Society" was organized in Baltimore. By these agencies vaccine virus was furnished gratuitously throughout the State and even beyond its limits, and several threatened epidemics were cut short.

So unselfish and eager were the physicians of that day for the universal participation of the blessings of this beneficent discovery that on February 16, 1812, thirty-eight leading physicians of the city offered to vaccinate all who should apply to them free of charge. Indeed, our noble brethren went even further than this, for they even offered to pay every child presenting proof of genuine vaccination twenty-five cents! Can any other body of men be cited who show such a spirit of unselfishness and self-sacrifice? Dr. Smith must be considered as particularly the father of vaccination in Maryland. His energy and efforts were continually displayed in its behalf. He was indefatigable, and in 1813 secured the establishment by Congress of a "National Vaccine Institute" in Baltimore, of which he became the agent. These efforts were advanced by the publication of a periodical called the *Vaccine Inquirer*, under the auspices of the society, of which he was the editor†. In 1816, smallpox being epidemic in Queen Anne's and Dorchester counties, Drs. Robert Goldsborough, J. K. Harper and J. D. Emory offered to vaccinate the poor

gratuitously, and by their zeal overcame the prejudice against it. In 1819, to give public proof of its efficacy and his faith in it, Dr. Smith inoculated with smallpox virus his two sons, nephew, ward and only daughter (all of whom he had previously vaccinated) at the bedside of a patient affected with variola. In 1821, on the recommendation of the Faculty, the city appointed vaccine physicians for each ward. It would be very interesting to trace this subject further, to recall the various efforts made by Jameson, Leonard, Knight and others to secure new virus by vaccinating and inoculating the cow, to describe the epidemics of smallpox that have occurred in Maryland since the introduction of vaccination and the frequently-arrested epidemics, the introduction of fresh virus from the famous Beaugency stock in 1866, and, finally, the introduction of animal virus and the improved method of performing the operation; but I must economize my space and proceed to other matters. Inoculation was not forbidden by law until 1850.

I do not find that the society in its corporate capacity took any special part in connection with the epidemics of yellow fever which have prevailed in Maryland,



DIPLOMA, WASHINGTON COLLEGE OF MEDICINE.

**Medical Herald and Eastern Shore Intelligencer.*

†This periodical was begun March 15, 1822.

especially during the early years of its existence, but its individual members have borne, as was to be expected, a prominent part in the local history of this disease. The first epidemic of the disease in Baltimore and probably in Maryland occurred in 1794, it having raged during the previous year in Philadelphia. It appeared again in 1797, 1798, 1799, 1800, 1819, 1820, 1821 and 1876—at least I find records of its existence during these years.* In all these visitations, and in that terrible one in Norfolk in 1855, the members of the Faculty have stood bravely at their posts and have given their services and often their lives as a sacrifice to duty. We may with pardonable pride quote the language of the mayor of Baltimore with reference to the conduct of the physicians, all members of this society, upon this trying occasion: "In adverting to this calamity I should commit an act of injustice were I to omit to notice the humane and magnanimous exertions of those medical gentlemen residing in or near the vicinity of the infected district and those who extended their assistance when the disease had attained its greatest extent and malignity; some time previous to which period the more wealthy of our citizens and their families from within the district had removed, and very few remained except those who, by the deprivation of their means of support or from extreme indigence, were able to afford but little prospect to the physician of pecuniary remuneration, equal even to that which he might actually be called upon to expend from his own means on this account. They still persevered and attended indiscriminately all, the rich and poor, suffering no considerations to deter them from the indulgence of their philanthropic feelings. As the cases multiplied the calls upon them increased, and their natural rest was destroyed and their anxieties strained to such a pitch that their own lives appeared likely to become a sacrifice to their disinterested zeal."

Among the deaths in the profession during this epidemic were Drs. John



Engraved from portrait in possession of the Medical and Chirurgical Faculty.

SAMUEL BAKER, M.D.,
of Baltimore.

1785—1835.

First President of the "Medico-Chirurgical Society of Baltimore," which, in July, 1832, through its committee, of which Dr. Baker was chairman, originated one of the first codes of medical ethics in the United States. Dr. Baker instituted the library of the Medical and Chirurgical Faculty. At the annual meeting in 1830, on his motion, the sum of \$500 was appropriated for the purchase of books.

O'Connor, Oliver Bond, J. B. Caldwell, Clark, H. Dorsey and Josiah Henderson. These attacks were limited strictly to the low-lying parts of the city, in no case spreading from patients removed thence to higher and immune localities; hence all who could were encouraged to remove and the poor were placed in tents upon the high grounds. In 1855, after personally investigating the epidemic at Norfolk, the Board of Health concluded that the disease was purely local and non-contagious, and the city having been thoroughly cleansed the year before, they admitted refugees from the stricken city without let or hindrance. Twenty-six of these refugees died of the disease after reaching here, yet not a single resident of Baltimore contracted the disease. Of our physicians the following volunteered their services to the citizens of Norfolk and Portsmouth, the last three losing

*The disease prevailed to a limited extent in intervening years, but not sufficiently to be considered epidemic.



Engraved from bronze bust in possession of Medical and Chirurgical Faculty.

NATHAN R. SMITH, M.D.,
of Baltimore.
1797-1877.

The great surgeon of Baltimore for fifty years. Inventor of "the anterior splint." Received his degree from Yale College in 1823. Professor of surgery in University of Maryland, 1827 to 1870.

their lives: Drs. John Morris, John H. Muller, H. Webster, Marc Grahame, T. Boone, John A. Marshall, Charles T. Walker and Robert Thompson. The visitation of 1876 was much less severe than its predecessors and was limited to Fell's Point.

The epidemics of cholera are also of great interest. The largest of these occurred in 1832, when there were 853 deaths in the city alone, among them being Dr. John Cromwell, founder, and Drs. Edgar and Ealer. The first case occurred on the 4th of August. Special hospitals were opened at this time and placed under charge of Drs. George B. Mackenzie, John Carrere and A. L. Warner. In 1849 a limited epidemic occurred at the almshouse, eighty-six deaths being recorded. In the summer and fall of 1866 occurred the last visitation, but the disease was not extensive, but sixty-two deaths in all being reported.

The founding of our library was the

chief event of the year 1830. At the annual meeting of that year, on motion of Dr. Samuel Baker, the sum of \$500 was appropriated for the purchase of books. Dr. Baker was then chairman of the library committee, and in that capacity he continued to take a great interest in the work until his death in 1835. The collection increased slowly, but it embraced the choicest works of the day. Donations also came in from the members, and in 1839 it was reported to be "perhaps more select and rich in value for its extent than any other in the country."*

In 1839 a critical event in the history of the society occurred, which deprived it of its chief privilege and right and came near destroying it altogether. This was nothing less than an act of the legislature virtually repealing its charter. Some years before this a sect in medicine had been founded by one Thomson, a native of New England, one of the leading principles of which was that the human body was composed of four elements (?)—earth, air, fire and water. By these philosophers metals and minerals were regarded as having the tendency to draw all down into the earth who use them, this view being founded upon the convincing fact that they are found only in the depths of the earth. On the other hand, since vegetables spring up out of the dross and vulgar earth into the air they tend to raise men away from the grave. This sect had a brief season of success, as many another false and absurd practice has, but the lack of merit in it, the ignorance of its followers and the violent and even fatal effects of the powerful doses of herbs which they employed led in time to its dissolution. About the time mentioned these men had sufficient influence and address to control legislation in this State and obtain from the legislature the passage of an act entitled "An Act to Authorize Thomsonians or Botanic Physicians to Charge and Receive Compensation for their Services and Medicine." In the body of the act nothing whatever is said about Thomsonians or any other special class

*Mem. of Samuel Baker. *Maryland Medical and Surgical Journal*, Vol. I, 1839.

of practitioners, but the language is: "It may and shall be lawful for each and every person, being a citizen of this State, to charge and receive compensation for their services and medicine in the same manner as physicians are permitted to do." Dr. Quinan, who made the subject of the charter-rights of the Faculty the theme of his presidential address in 1886, discusses the validity of this hybrid law and shows very conclusively that it is a point well established and beyond controversy that an act of the legislature of Maryland must be construed according to its title, and hence that the act in question excepts no one but Thomsonians or botanic physicians. As these no longer exist the law is inoperative, and as there is no other legislation upon the statute-books repealing the act of 1798, that act is still in force as fully as it ever was. By reference to decisions of the Supreme Court, also, Dr. Quinan showed that chartered rights are inviolable, and that the legislature in depriving our society of any portion of its rights under the original charter was going beyond its powers. The reasoning and facts of our late eminent colleague seem incontrovertible, and although his earnest pleading had no effect, I cannot resist the temptation to give his conclusion: "And now, gentlemen, in closing, let me say that if, after a full examination and deliberate discussion of this question, you decide, as I do, that our chartered and vested right to require licenses from all who desire to practice medicine and surgery in this State exists today in all its integrity, unimpaired by legislation, unrevoked by judicial decisions as it did on the day it was granted, eighty-seven years ago, then I adjure you by your own regard for your own highest professional interests, by your regard for the honor, dignity and moral elevation of your calling, by your respect for the example of your brethren in other and adjoining States, who have successfully driven from their borders the hordes of harpies who were fattening on the credulity of the people, by your regard for the ancient reputation of this venerable Faculty and the restoration of that vigor of which it has been so long shorn by the Delilah of



Engraved from bronze bust in possession of Medical and Chirurgical Faculty.

JOHN BUCKLER, M.D.,
of Baltimore.
1795—1868.

The great family physician of Baltimore. Was graduated from the University of Maryland in 1817. Was adjunct professor of anatomy in the same.

supineness and neglect, by your regard for the lives and sanitary welfare of the community—by each and all of these considerations I adjure you boldly and manfully to assert and enforce your vested rights and at once and forever clean out the Augean stable of charlatanism and quackery, with their prescribers and endorsers of star cures, kidney cures, liver regulators, blood purifiers, earth cures, *et id omne genus*, which shame the face of day in flaunting handbills on street corners and in drug shops, whose proprietors show their gratitude for our patronage by presenting over their counters the sugar-pellet nihilisms and more harmful nostrums that disgrace a decent pharmacy, and let us strip the mask from these unlicensed medical pretenders, begot by a foul union of unblushing effrontery, stolid ignorance and insatiable greed, that are fast rendering our noble



FIRST MEDICAL JOURNAL IN MARYLAND.

Established April, 1808, by Dr. Tobias Watkins; the third medical journal edited and published in the United States. It was issued quarterly, and the first number contained eighty pages of printed matter. It suspended publication in 1809. From this first venture in medical journalism to the founding of the present *Maryland Medical Journal*, covering a period of nearly threescore and ten years, more than a dozen journals entered upon a brief career and suspended for want of professional support. These all were ably conducted and well worthy of substantial patronage, aside from the local interest which should have attached to such enterprises.

art in this State a stench in the nostrils of every lover of legitimate medicine.”*

We do not learn that any protest was uttered at the time of the legislative act of 1838 nor any attempt made to test its validity or to assert the rights which the Faculty had been exercising unhindered for the previous forty years. The Faculty supinely submitted to the blow—and a terrible one it was—which in one instant deprived it of the essential feature of its charter—a charter obtained only after so many years of painful and eager longing, and swept away, as with a besom of destruction, the fairest hopes of the profession. Years afterwards an attempt was made by a few noble spirits—Roberts, Cohen and others—to reclaim the lost rights, but a strange apathy enthralled the members, and the effort proved a dismal failure. It was not repeated until Dr. Quinan’s day, and then with results equally unsuccessful.

The first and only attempt ever made by the Faculty to conduct a medical jour-

nal was begun in this same year (1839), the first number appearing in October. It was published quarterly and continued to the end of the third volume, suspending after the issue of March, 1843. It was under the editorial management of a committee of the Faculty, consisting of Drs. Potter, Roberts, Chew, S. G. Baker and others, and was adopted by the medical departments of the army and navy as their official organ. It was conducted with enterprise and ability, and was particularly rich in original contributions. It is hard to see why it should have failed.

The close of the first half-century (1848) was marked by the meeting in Baltimore of the American Medical Association. This was the first annual meeting of the National Association, and was attended by a large number of delegates from this Faculty, from the Medical and Chirurgical Society of Baltimore, from the Kent and Frederick County Medical Societies, from the colleges and their alumni associations and from the hospitals. The use of anesthetics was, of course, the subject of supreme interest at that date, and our Maryland surgeons seem to have borne their share in establishing their safety and utility. This brings us to the close of the first half-century of the society’s career.

It was not long after this before the society began to take on new life and activity owing to the participation in its affairs of new elements that became affiliated with it about that time. Among those who were particularly active were Drs. Richard McSherry, W. Chew Van Bibber, David Stewart, Francis Donaldson, George C. M. Roberts, Michael S. Baer, F. E. B. Hintze, Christopher Johnston, Charles Frick, Joshua I. Cohen, John F. Monmonier and George W. Miltenberger. Particularly valuable papers were presented at this time by Drs. Frick, Johnston, Donaldson, Stewart, Steiner, Miltenberger and Van Bibber. Science began now to claim attention, and the meetings were no longer devoted to strictly executive and routine work. The publication of the Transactions for the first time in 1853 aided powerfully in infusing new vigor

*Presidential address of Dr. John R. Quinan, April, 1886.

into the society.* Dr. Hintze proposed a number of resolutions—to organize auxiliary ward and election district associations in the cities and counties, to secure a more thorough organization of the profession, “such as has been so successfully effected in Virginia and other States,” to secure means of publication, to adopt a code of ethics, to secure a permanent building or rooms to be used as library, reading and meeting rooms, to be built, purchased or leased,” etc. These proposals show that one of those periodical revivals which are found in the career of all societies and communities had taken place in this society, and they led to important results. One was the publication of the Transactions, already mentioned. These continued to appear from 1853 to 1859, inclusive, when they were suspended for fourteen years. The records show increased interest in scientific matters and in sanitary science. That a society representing, as this does, the entire profession of the State, and capable of wielding such a powerful and beneficial influence in matters bearing upon the general health of the people of the State, should be silent through all these years would have been an unexampled prodigy. That until the last few years of the century it has not shown the ac-

*A committee was appointed in 1852 to secure a good attendance the next year. This committee, composed of Drs. Hintze, Yeates and Dunbar, issued a circular inviting all the members, and perhaps others, to be present. Their efforts were successful and the meeting was a large one; many new members were added at this time.



Fac-simile reproduction (about one-fourth size) of the first page of initial number of the *Maryland Medical Journal*, established in May, 1877, as a monthly, under the editorial and business management of Dr. H. E. T. Manning and Dr. Thomas A. Ashby. In 1880 was changed to a semi-monthly. With the beginning of Volume X it began as a weekly. The *Journal* is now owned and controlled by the Medical Journal Co. (Incorporated) of Baltimore and Washington. It is the only regularly established medical journal in the State.



Vol. I-II in the Library of the Surgeon-General's Office, Washington, D. C.

tivity in these matters that might justly have been expected from the character of its membership must be confessed with some degree of shame; still we find evidences here and there of wise suggestion or effort. The attitude of the society with reference to the introduction of vaccination at the beginning of the century has already been noted. In 1855 Dr. Donaldson offered a resolution “that a committee of five be appointed to memorialize the next legislature for the enactment of a law for the uniform registration of births, deaths and marriages throughout the State.” This resolution was adopted next day. At the next session the committee reported, through Dr. Donaldson, that “a bill was framed and passed the lower House by a nearly

unanimous vote, but was neglected in the Senate in the pressure of business at the close of the session." The committee felt confident that the bill would be passed. In 1858 Dr. Donaldson reported that his committee "had urged the necessity of such a law upon the individual members of the legislature, but without success." He urged the continuation of the agitation of the question before successive legislatures until success should be achieved. The committee was continued, but was unable to accomplish anything further.*

With the exception of the earliest meetings the annual conventions had always, so far as the records show, been held in Baltimore. The reason of this is not far to seek. The advantages of a large city, the metropolis of the State, centrally located and readily accessible from most parts, with the almost certain assurance of a quorum, are self-evident. In November, 1853, a special semi-annual meeting was held in Easton, and again one was held at Frederick City. Of late years these semi-annual meetings have been frequent and now form an established custom of the society.

An interesting event of 1853 must be mentioned in passing, which was the visit of the venerable Ashton Alexander, the last surviving incorporator, to the convention on June 3 of that year. On motion of Dr. Roberts, a committee of three had been appointed on the previous day to wait upon Drs. Alexander and Samuel K. Jennings and invite their attendance. The committee—Drs. Roberts, Dulin and Dunbar—having performed the service, Dr. Yeates, the president, arose and introduced the guests to the audience. Dr. Alexander returned thanks, stating that nothing in his life had gratified him more than this invitation; that he had always taken a deep interest in the Faculty, and had had the honor of being its first secretary and afterwards one of the Board of Examiners. He would always have an abiding interest in the welfare of the Faculty. He was then compelled to leave from exhaustion. As he did so the members, by a spontaneous impulse,



ANATOMICAL PLATES.

These photo-engravings represent two anatomical manakin charts in an old anatomy printed in Amsterdam in 1634 and presented to Dr. Charles G. W. Macgill of Catonsville by his father, Dr. Charles Macgill. The book was formerly the property of Dr. James Macgill, surgeon, conjoint professor and demonstrator of anatomy to the Surgeons' Company, Edinburgh, 1700-1719.

arose and remained standing until he had passed out of the door. A resolution was then adopted "that the Faculty felt great gratification in having the presence of Drs. A. Alexander and S. K. Jennings at their session, and that the secretary furnish each of these gentlemen with a copy of the above resolution."

The library continued to receive the care of the Faculty, with a liberal appropriation for its growth. But for several years it was boxed up at the Mercantile Library Rooms and unavailable.

Up to 1830 the infrequent character of the meetings—biennial according to the constitution—rendered unnecessary the possession of a building, but with the acquisition of a library this was changed, and the subject must often have recurred to the members from that time on. The proposal for a permanent building was made, as above stated, by Dr. Hintze in 1853. In 1856 Dr. Crane called attention by resolution to the need of a fixed and

*Dr. George Buchanan, one of the founders, had advocated the registration of births in 1790.



permanent place of meeting and of a place for the safe keeping and proper using of the library, and moved the appointment of a committee of five to determine upon the site for the erection of a hall. This was adopted in substance, and a special meeting was held to confer about the matter. In 1857 the committee reported that a building had been offered at 47 North Calvert street, owned by C. Kidder, which might be had by transfer of the stocks to the owner in full payment, price \$3425, lot twenty-five feet front, with depth of 100 feet to a street. "The house covers the entire front, two stories and attic high, with a back building also two stories and attic, nine rooms and cellars under the whole." There was a ground rent of \$150 per annum, redeemable at pleasure. The purchase being authorized, the stocks were transferred, viz., \$1100 City of Baltimore 6 per cents, \$150 Farmers' Bank, Annapolis, \$2175 Union Bank stock.

All things were arranged satisfactorily, and on the 2d of June, 1858, the president, Dr. Joshua I. Cohen, "congratulated the members upon their assembling for the first time since their origin in 1799 in their own hall and under circumstances so favorable to the future pros-

perity of the Faculty." The funds derived from the license dues and wisely invested and guarded during the previous half-century by Dr. Cohen and others being thus expended, the treasury was left almost empty. Special contributions were solicited of the members, and great liberality was evinced. With funds thus



KNIFE USED IN FIRST OPERATION IN TYING BOTH CAROTID ARTERIES.

This scalpel was used in 1822 (the year of his graduation) by Dr. William D. Macgill of Hagerstown, in his operation of tying both carotid arteries in the same subject, for fungous hematomas of the eyes. This was the first operation of its kind performed. Dr. Macgill was graduated at the University of Maryland in 1822; died in Hagerstown, 1833. The knife is the property of Dr. Charles G. W. Macgill of Catonsville.



Engraved from portrait in possession of Medical and Chirurgical Faculty.

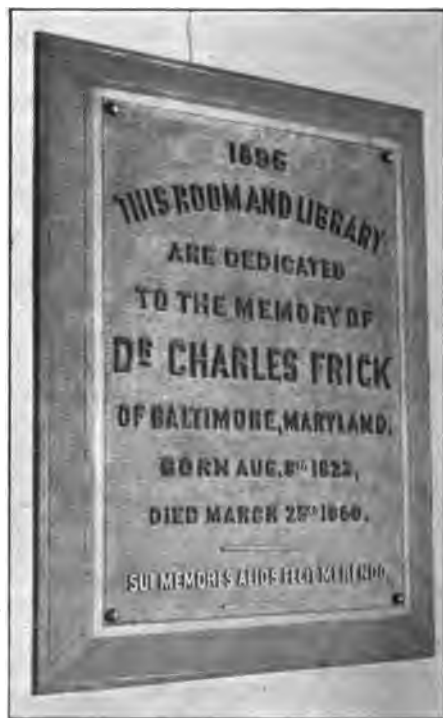
CHARLES FRICK, M.D.,
of Baltimore.
1823—1860.

In his memory his brothers founded the Frick Library and Reading-Room at the Hall of the Faculty.

raised the building was furnished and arranged and a considerable amount secured for the extinguishment of the ground rent. The library was removed to the shelves provided and everything seemed to promise well for a long and prosperous career of the Faculty. The room was commodious, the books were properly arranged on neat and convenient shelves, and by the assistance of volunteers were accessible at regular hours. The library committee say: "The older members of the Faculty must well recollect that for many years the library was the great tie which bound them together, and was for a considerable period one of the strongest inducements afforded wherein we derived the main part of our revenue by the addition of new members. While it afforded facilities to many not otherwise easily obtained, it was a just matter of pride to the whole Faculty, who as long as their funds remained unimpaired evinced their appreciation of its usefulness by the liberal appropriations yearly made for its main-

tenance and increase. * * * No one can deny that the coolness manifested towards the library corresponded with the darkest period of our history, and that from the time when its increase ceased to be a main object of consideration there has been a less active spirit actuating our body and a greater difficulty in recruiting our ranks. The most feasible plan to draw the profession into the society appears to us to be a return to our old faith and habits and a firm resolve to render the library sufficiently valuable to offer attractions to all our brother-practitioners. The nucleus we now possess is of exceeding value. We could not desire a better basis of standard and rare works around which to cluster the more modern offsprings of the profession. It would require but a comparatively small annual stipend, wisely and carefully expended, to render it attractive to all" (Dr. Miltenberger, chairman).

A fine oration was delivered in the new hall on the evening of June 3. The Maryland College of Pharmacy engaged



THE FRICK TABLET.

the hall for its monthly meetings and session the ensuing winter.

An ominous circumstance at the close of this meeting so auspiciously begun was the failure to secure a quorum on June 5, Saturday, 2 P. M.; it had to adjourn for this reason until Monday the 7th at 12 M. At that time there was again no quorum, and it adjourned again until evening. Then there was still no quorum, and the annual meeting ended.

On June 1, 1859, six members (including president and secretary) were present to open the meeting. This not being sufficient, an appointment was made for the next day. Then the officers were successful in getting together nineteen, but there was no report from either Shore and no applicants for membership. Everything was going wrong, and stagnation was creeping in everywhere. The library was being deserted and but one-half of those who had contributed to its increase had paid their contributions. The treas-



From a photograph made in London.
MR. WILLIAM F. FRICK,
Donor of the Frick addition to the Library and
Reading-Room at 847 North Eutaw street.



THE READING-ROOM AND FRICK LIBRARY.

This department of the Medical and Chirurgical Faculty, at 847 North Eutaw street, is the endowment of Prof. Charles Frick's brothers and Mr. Reverdy Johnson. It was inaugurated on December 10, 1896.



SAMUEL C. CHEW, M.D.,
of Baltimore,

President of the Medical and Chirurgical Faculty
of Maryland, 1890.

urer had taken in but \$32 during the year, besides the amount received for rental. Not a single fee for membership had come in. Hard times were pressing upon the country. The committee on the hall had desisted from efforts to raise money, having failed entirely in their collections in the counties, whilst city members had but in few instances paid their subscriptions. The close of this annual meeting was but a repetition of that of the previous year: "Monday, June 6, no quorum, adjourned; Tuesday, June 7, no quorum, adjourned," and thus it ended.

And now ensued a long sleep, during which there was no meeting of the Faculty held. The Executive Committee during these years of hibernation acted as the Faculty—they elected officers, re-elected themselves, took care of the property and looked after the interests of the society. The names of this committee were Dr. John F. Monmonier, chairman; Drs. Christopher Johnston, George W. Miltenberger, Alexander Robinson and H. P. C. Wilson, and to them belongs the credit of preserving the society and mak-

ing this centennial a possibility, for there can be little doubt that if they had failed to keep up the organization during these years of civil warfare and reconstruction, no one would have thought it worth while to make the attempt to revive a society which had been shorn of its chief prerogative and means of income.*

Passing over this period, we come to 1870, when the records first tell us of another revival, the last great inspiration of vigor and life which I shall have to report, for from that time to the present the meetings and the publication of the Annual Transactions have never been omitted and the activity of the organization has been continually on the increase.

I shall not be able in the limited time and space at my disposal to do more than mention the most important events of this period of thirty years, representing almost a generation. It is fresh in the

*I find that the following resolution was adopted on April 16, 1863, on motion of Dr. Powell: "Resolved—That we are profoundly conscious of our obligations to the older members of the Medical and Chirurgical Faculty of Maryland, who by their fidelity, zeal and self-sacrifice, maintained the vitality of the Association, amid discouragements which would have daunted a less heroic and faithful band," etc.



J. WILLIAMS LORD, M.D.,

Recording Secretary Medical and Chirurgical Faculty of Maryland, 1890.

minds of many, especially the last decade of it. First of all, I shall have to speak of our unfortunate business mistake, which cost the society in the end its valuable property and swept away the hard earnings of many, many years of savings. This was the disposal of the Calvert street property. Calvert street being a great thoroughfare, owing to the conformation of the ground in that section of the city, all the traffic carried on between parts south and parts north of that was done over this thoroughfare. Hence quiet and composure, so necessary to reading and to the conducting of medical societies or courses of instruction, were not to be obtained there. So the idea was taken up that we should seek some new retired and quiet situation where the sources of annoyance and distraction would be less. In theory this decision was good, but its execution was dangerous. Accordingly, the building was disposed of and another on the west side of Courtland street, between Mulberry and Franklin streets, purchased. This house was occupied on the 27th of October, 1869, over \$7000 altogether being put in it. Everything then looked hopeful; the building was satisfactory in itself, and we had quiet and retirement in abundance. But it soon became apparent that a mistake had been made. The situation on the side of a steep hill was inaccessible, and the attendance at the library and the meetings of the local societies, which had joined our society in occupation there, began to fall off, so that in a few years it was found necessary to seek quarters elsewhere and rent the building. Then came the progressive fall in the valuation of real estate, until finally, as it was bringing the society more and more into debt, it was decided to sell it at almost any cost, and it was actually disposed of for \$550, of which about \$500 came into our treasury. Then for some years the society was on the go—occupying rooms on Fayette street, near Park avenue, and, later, the basement of the Athenæum Building on the corner of St. Paul and Saratoga streets. Then came the determination to have another building of our own, which culminated in the purchase in 1895 of the residence 847 Hamilton



BALTIMORE CITY AND HARBOR
At the time of the Centennial Anniversary of the Medical and Chirurgical Faculty of Maryland, 1899.

Terrace. This, remodeled at an expense of several thousand dollars, is our present home. Here the Frick addition to the library, endowed by Prof. Frick's brothers, Messrs. William F. Frick and Frank Frick, and Mr. Reverdy Johnson, was inaugurated on the 10th of December, 1896.

In consequence of this generous aid, supplemented by liberal gifts from the Journal Club and individuals, the number and value of the collection have increased very rapidly in the last four years. The number of volumes is now over 12,000, whilst there are several thousand pamphlets. There are received regularly 143 journals. For the year ending April 1899, the number of volumes received was 2323. For the same period 3587 persons were reported to have made use of the books and journals. The number of books and journals taken out by physicians was 1048.

In late years the Faculty has been active in many ways. The most important achievement was the securing of legislation restoring to our society the control of the license to practice in this State.* This was in 1892. Under this law the society has the right to appoint a board of medical examiners, before whom all physicians who enter upon practice in this State must appear and pass a satisfactory examination. The benefits of this law have been conspicuous in the elevation of the standard of the profession and of the medical schools in this city. It is also most efficiently administered by the excellent board that has been entrusted with its execution. The Faculty has also by its efforts secured efficient lunacy and anatomical legislation, so that the interests of the insane

are now in the hands of an able commission, whilst the law provides an abundant supply of anatomical material without the necessity of a resort to irregular and repulsive means to obtain it.

About \$14,000 have been raised since the movement for a new building began, and the present debt of the Faculty has been reduced to the small sum of \$2000. This, it is confidently expected, will be liquidated during the centennial meeting this week.

And now I am admonished to bring this brief and very hurried sketch to a close.

We have reached the end of the century in a condition far more satisfactory and prosperous than we had any reason a few years ago to expect, and we should now enter upon the second century of our existence with hopefulness and confidence.

That better things are in store for us, it scarcely requires the tongue of a prophet to foretell. Everything points to change and improvement. Our present home is entirely inadequate for the growing needs of our rapidly increasing membership and library. We need a building that will be an ornament to our city and will stand no invidious comparison with those of the other great metropolitan cities of the country—New York, Philadelphia and Chicago; and we need an adequate endowment fund for our library. If we are unable from our own resources to provide these things, let us call upon the citizens of Baltimore and Maryland for assistance. This community owes us something for what we have done for it, and it requires but a vigorous and concerted effort to secure a portion of the wealth which is being lavished in so many other directions.

EUGENE F. CORDELL, M.D.

*In order to obtain this we were forced to concede an equal right to the homœopaths.

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Original Articles.

THE RADICAL TREATMENT OF CHRONIC SUPPURATIVE OTITIS MEDIA—EX- HIBITION OF PATIENT.

By H. O. Reik, M.D.

REPORT OF REMARKS BEFORE THE JOHNS HOPKINS
HOSPITAL MEDICAL SOCIETY, APRIL 10, 1899.

IN considering the radical treatment of chronic otitis media suppurativa it will, of course, be understood that I refer only to those cases of this disease that have resisted properly and carefully applied conservative measures used for a reasonable length of time. I would not, by any means, be understood to advocate the use of surgical measures in all chronic otorrheas, nor even in any case until after a fair trial had been made of the more simple methods of treatment.

Perhaps it would be well, before describing the operation and its results, to review very briefly the conditions that may demand it. At a recent meeting of this society we discussed the subject of acute middle ear infections and the importance of giving them prompt attention. It is undoubtedly true that if seen early a large majority of acute middle ear inflammations can be aborted or at least cured after a short period of suppuration; but there are, however, a considerable number of cases that resist all treatment, even though begun early and conducted carefully, and these may end in an acute mastoiditis or a chronic purulent otorrhea. Again, a great many cases of middle ear infection never seek treatment until after they become well established chronic processes, and this happens in this way: The onset of the trouble may

or may not be accompanied by pain, but even should this be severe, it usually lasts only a day or so, and disappears when the tympanic membrane ruptures and the discharge appears. The patient suffers no serious inconvenience from the discharge beyond the necessary trouble of occasionally cleansing the ear, and, at first hoping that it will soon cease of its own accord, he soon gets used to its presence and no longer gives it much thought. To him it becomes a small inconvenience, but to those of you who consider for a moment the anatomical relations of the middle ear it will seem as menacing to life as the carrying of a dynamite cartridge would be.

You will remember that the tympanic cavity is bounded by very important structures; for instance, anteriorly it is separated from the internal carotid artery as it passes through the carotid canal by a thin bony plate; the floor is in relation with the jugular fossa which lodges the bulb of the internal jugular vein; the posterior wall presents the opening into the mastoid antrum, which, in turn, is connected with the pneumatic cells, any of which may be in very close relation to the lateral sinus; the internal wall presents the round and oval windows leading into the internal ear and the canal for the facial nerve, and, lastly, the roof is a thin plate of bone separating this cavity from the temporo-sphenoidal lobe of the brain. It seems to me this is sufficient to show the necessity of striving for the absolute cure of every case of suppuration in this locality. We should not be misled into a false sense of security by the fact that the patient has carried his discharging ear for five or ten years, or longer, without discomfort, for we can never say at what time the diseased process will attack some of these vital structures and perhaps de-

stroy life before anything can be done to check its ravages.

When a case presents itself, then, with the history of a purulent discharge from the ear that has existed for a considerable length of time, what shall we do? It is impossible to lay down a hard and fast rule to be applied to every case, for much depends upon the condition of the individual under consideration. Where an operation is not urgently demanded, I believe it is wise to begin with simple, conservative measures, the object of which always is to secure, as far as possible, the cleansing of the pus cavity. By means of the syringe or douche the external auditory canal and tympanum should be thoroughly washed with an antiseptic fluid and then dried with absorbent cotton. For this purpose we may use solutions of boracic acid, carbolic acid, bichloride of mercury, formalin, etc. In many cases it will be necessary to try first one and then another of these, for while one will work satisfactorily in the first case, it will fail entirely in the second. The application of stimulating solutions, such as the sulphate of zinc, nitrate of silver, or, where granulations and polypoid masses exist, of alcohol, may be tried with success in some cases. When, after a reasonable length of time, say a month or two of such treatment, no benefit is derived, I believe it is time to institute surgical measures. The reasons for failure of treatment in these cases will be found in the peculiar anatomical structure of the diseased parts. In the first place, any long continued suppuration in the middle ear is accompanied perhaps always by more or less necrosis of the delicate bones suspended in this cavity or involvement of the mastoid antrum, and in the second place, it is almost impossible to secure perfect drainage of these cavities. The floor of the antrum is lower than the channel through which it empties into the middle ear, and while it continually discharges, it always retains some residuum. It is so situated, too, that it is almost impossible to cleanse it by syringing, and hence there remains a constant focus for the continuance of the suppuration.

Two methods of operating are receiving today a great deal of attention. The

first is ossiculectomy. By removal of the malleus or incus, or what remains of them, we improve the opportunities for drainage, and in a certain number of cases may secure good results. This method is not applicable to all cases, of course, and only cures about 50 per cent. of the cases in which it may be resorted to. It does not very much improve the chances of cleansing the antrum, and that is the most important point involved. It fails, then, in that it is not sufficiently radical.

About ten years ago two German surgeons, Professors Stacke and Zaufel, each acting independently of the other, suggested a much more complete and more satisfactory method of treatment, though at the same time a more severe measure. This consists in the removal of all diseased tissues, and the converting of the antrum, the tympanum and external auditory canal into one large cavity, which is to be lined by skin. Both methods accomplish the same ultimate results, and differ only in technique. Preparations for both are made in the same way. The area above and behind the auricle is shaven and thoroughly cleansed, every precaution being taken to make the operation as nearly aseptic as possible. The operation begins in the usual manner by performing a Schwartze mastoid operation; an incision, beginning at the upper border of the auricle and running down to the tip of the mastoid process, is made through the skin, the periosteum is elevated so as to lay the whole mastoid process bare, and the auricle is pulled forward by an assistant so that the cartilaginous portion of the posterior part of the wall of the external auditory canal can be separated from the bone through its entire length. In the Schwartze-Stacke method the removal of the bone begins at the junction of the external auditory canal and the tympanum, and the operator works out towards the antrum, but the majority of operators seem to prefer the Schwartze-Zaufel method, which begins with the usual opening into the antrum, is continued by the removal of all diseased bone in the mastoid process, and is followed by the removal of the bridge of bone between the antrum and middle ear, which forms the posterior wall of the ex-

ternal canal. By each method the ossicles, or such fragments of them as remain, and the tympanic membrane are removed. The next problem consists in securing the skin lining for this large cavity, and various measures have been suggested. Skin flaps may be taken from behind the auricle or from the external auditory canal, or Thiersch grafts may be used. The perforation behind the ear may or may not be closed. These are minor details, however, and can only be decided for the case in hand.

The patient I wish to exhibit tonight is George Diggs, colored, fourteen years of age. He came to the Baltimore Eye and Ear Hospital February 10, 1899. The records of the hospital show that he was brought to the dispensary for the treatment of suppurative otitis eight years ago. At that time he was an inmate of the Deaf and Dumb School, and, so far as I can learn, he has never been able to speak or hear. He continued an irregular visitor from that time until two years ago, when I first saw him. He had been advised a number of times to submit to operation, but his mother always refused permission. The odor of the discharge had become so disagreeable that the superintendent of the school refused to keep him longer with the other children, and he was sent away. We saw no more of him until February 10, when the superintendent again brought him to the hospital and stated that the mother had deserted the boy and he had found his way to the institution again, but that he could not keep him unless something were done to overcome the bad odor. I must say the patient was the dirtiest specimen of humanity I have ever seen. With no one to care for him, he had probably gone unwashed for a considerable time; the collar and shoulder of his coat were matted with the discharge from the ears, and the odor of that discharge defies description. An examination showed both auditory canals filled with inspissated pus and granulation tissue, and behind the auricle on the left side was a fistula which led into the antrum. Fluids syringed into this fistulous tract forced pus and cheesy material out of the external auditory canal. The patient was anesthetized, and

beginning at this opening, an incision was made upwards to the top of the auricle and downwards to tip of the mastoid process. The opening in the bone was enlarged, the mastoid cells broken down, and all necrosed tissue removed by curettement. The posterior wall of the bony external auditory canal was then removed so as to make the antrum, tympanum and external canal all one cavity. No trace of the malleus or incus was found, and the internal and superior walls of the tympanum were eroded and had to be scraped. When we could feel that the field of operation was clean, a horizontal incision was made in the whole length of the posterior cartilaginous wall of the canal and another vertical cut made to cross that about its center, so that we had four quadrilateral flaps to be pressed into this large cavity to form a lining. The posterior wound was closed by sutures, and the external canal and cavity packed with iodoform gauze to keep the flaps in position. The dressings were not removed for one week, at the end of which time the post-aural wound had closed. On March 1, eighteen days after admission, all dressings were removed, the cavity being thoroughly covered with skin and absolutely dry. On March 3 the right ear was operated upon in the same way, the details of the operation being about the same as given above, except that after opening and cleansing the antrum, the appearance of granulation tissue led us to open downward and backward until we came directly upon the sigmoid curve of the lateral sinus, the outer walls of which were covered with granulations. All this tissue was removed by curetting, and the further treatment was the same as described above. The patient has made a rapid recovery, and you will find on inspection that both of these large cavities are completely covered with skin.

PREVENTION OF HEREDITARY SYPHILIS.—Fournier in the American Journal of Obstetrics advises that the pregnant mother be treated with mercurial ointment to prevent the transmission of syphilis from a diseased father. Treatment should be begun early and continued for twenty days in each month.

GELSEMIUM SEMPERVIRENS

By Noble P. Barnes, M.D.,

Washington, D. C.

READ BEFORE THE THERAPEUTIC SOCIETY OF THE
DISTRICT OF COLUMBIA, APRIL, 1899.

IT was in the summer of 1836 when the Southern section of our county was shrouded in gloom by the then dread malaria, when there were not enough well people to attend to the sick ones, and when "death seemed to walk in the wake of doctors." At such a time and place did one of the lights of modern medicine come near flickering out, who, having survived, "carried the fame of American surgery throughout the civilized world," and retired the father of gynecology.

As the disease progressed physicians and nurses were unable to reach all the sufferers, and many families were left upon their own resources to live or die. Among the number was a Mississippi planter who had been laboring under a severe attack of the commonly-called "bilious" fever, which was uninfluenced by the remedies then in use. His servant was sent into the garden to procure a root of some medicinal virtue, and, by mistake, collected another, an infusion of which was given to the master. Very soon there was complete motor paralysis, the man being unable to move a limb or open the eyes; the higher cerebral centers, however, were unaffected, he being cognizant of transpiring circumstances, though unable even to articulate. Anxious friends in fear and alarm gathered around awaiting the last breath that would shake "off this mortal coil." Some hours passed, and the man gradually recovered, greatly and agreeably surprised to find that the fever was gone. Ascertaining what root it was, the infusion of which had so benefited him, he collected and employed it successfully on his own plantation and among his neighbors.

A physician hearing of the virtue of this root, prepared from it a nostrum, disguised with wintergreen, and called it "Electrical Febrifuge." This root was the root of *gelsemium sempervirens*, commonly known as the yellow jasmine, or *jassamine corlina*—jasmine or jassa-

mine—wild woodbine or evening trumpet flower. The plant began to receive scientific attention about 1869, but its remarkable virtue is yet unknown to many physicians.

A few months ago cards, with a list of drug names, were sent to many physicians, with the question, "Have you any reason why these drugs should not be dropped from the official list of the pharmacopeia?" *Gelsemium* was one of the drugs named, and this paper is intended in its defense, at the same time to arouse a greater interest and a more thorough study in a reliable drug with a wide range of action covering many indications.

Yellow jasmine, the beautiful climbing evergreen, is the one plant dear to the hearts of the Southerners, and for its shade and fragrant flowers is extensively cultivated for ornamentation. This twining vine flourishes profusely from Virginia to Florida, and blooms in early spring—in Florida in February and March, in Mississippi and Tennessee in May and June. "The name *gelsemium* was given it by Jūs-sū, and derived from the Italian *gelsomina*, meaning jasmine." "The name *gelseminum*, as used exclusively by eclectics, arose from a typographical error, and was widely copied in various writings and accepted as authority before the mistake was discovered" (Lloyd, E. M. J. 92, A. D. 1900).

Through the kindness of Mr. Theo. A. Melter, botanist of the Florida Botanical Drug Co., I am able to present to the Society these specimens of the root and rhizome. The wild growth contains a large proportion of wood, and would appear not to be so desirable as the cultivated growth, which is free from woody parts, therefore possessing more medicinal virtue and being more reliable. "The rhizome and roots should be gathered at the beginning of the flowering season, being unfit for use at other periods, during a period of several warm days, and not during a continued cold or damp time" (Melter).

There is a division of opinion in regard to the preparation of the root, and either the fresh green or the fresh dried root will yield good preparations. The reputation of the drug has suffered some from

the worthless preparations put upon the market—preparations made from old worm-eaten and woody roots, or some gathered out of season, or some made from a variety of roots other than gelsemium gathered by ignorant persons. I think I am safe in saying that the root-lets should be allowed to dry in the shade, as the inherent water in the fresh root diluting the alcoholic menstruum would impair its solvent power and make a much weaker preparation. They should then be packed in alcohol and shipped to the manufacturer.

"The average percentage of alkaloid in sound root is one-fifth of 1 per cent., and the full constitutional effects of the medicine are uniformly obtained from a standard fluid extract" (Thompson). This alkaloid gelseminine is a non-crystallizable dry mass, white, alkaline, insoluble in water, soluble in alcohol, ether or chloroform. The gelseminine nitrate is the best salt to use, it giving effect of the drug in its intensity (dose 1-125 to 1-30 grain; maximum dose 1-30 to 1-5 gr. per day). Another alkaloid gelsemine yields crystallizable salts. Gelsemin (resinoid, dose 1-16 to $\frac{1}{2}$ gr.) and gelsemine sulphate (dose 1-100 to 1-50 gr.) are coming into favor with many physicians, but good, reliable liquid preparations can be had that represent the full medicinal virtue of the drug.

Of the official preparations there are two, *extractum gelsemii fluidum* (dose one to three minims) and *tinctura gelsemii* (dose two to fifteen minims). There are several good preparations I am able to show you through the kindness of the manufacturers. First, the fluid extract is the preparation with which I am most familiar; it is permanent and satisfactory; the dose upon the bottle (five to ten drops) is a little large, and should be from one-half to two minims. This preparation represents 456 grains of gelsemium to the fluid ounce.

Gelseminum (Lloyd) is also a typical representation of the drug, containing 480 grains of gelsemium to the fluid ounce. The normal liquid gelsemium is made from the fresh dried root. The standard is 0.5 per cent. total alkaloid by weight; the dose is from one to ten min-

ims. The green root tincture is another preparation largely used; dose ten to thirty drops. There are several other good preparations on the market, but these are enough to choose from.

Physiological Action.—Gelsemium is an anti-spasmodic, anti-pyretic, anti-neuralgic, anti-malarial, anaphrodisiac, analgesic, hypnotic and diaphoretic. It is a nervous sedative and depressant, and by direct action on the spinal cord dulls and finally paralyzes motility and sensibility. It exerts this function more especially upon the third, fourth, fifth and sixth cranial nerves and those supplying the genito-urinary organs. Reflex excitability is at first increased, then diminished and finally exhausted, thus giving the drug a double action.

Minute doses (1-5 to 1-50 minim, F. E.) stimulate reflex action; small doses ($\frac{1}{2}$ to 1 minim, F. E.) relax the general nervous system, relieve nervous irritation and muscular tension.

Larger doses (1 to 5 minims, F. E.) cause languor, enfeeble muscular action, impair sensibility, dilate the pupils, droop the eyelids and excite diaphoresis. The effect of a moderate dose passes off in three or four hours.

Toxic doses (10 to 60 minims, F. E.) produce vertigo, diplopia, ptosis, dilated pupils, profound prostration and muscular relaxation, partial paralysis of the involuntary muscles, first the sphincters, then the respiratory, then the heart. Respiration is at first quickened, then becomes slow and shallow and labored; the heart is similarly affected. The jaw drops, articulation is lost, there is general anesthesia, profuse perspiration, lowering the body temperature and, finally, asphyxia, due to paralysis of the respiratory muscles. During this time consciousness may be lost; more frequently the mind remains clear until CO₂ narcosis sets in. Death from gelsemium taken by the mouth occurs in from one to eight hours (Lloyd); hypodermically from eighteen to sixty minutes. Gelsemium used locally on the eye causes ciliary congestion and slight contraction of the pupils, followed by disappearance of hyperemia and dilatation of pupils. Gel-

gelsemium exercises a germicidal power over the plasmodium malariae.

Antagonists are small doses of opium or morphine and atropine. Digitaline and strychnia would also be indicated. Stimulation, in the way of heat, electricity and artificial respiration, are measures of prime importance in combatting an overdose. The fatal cases of poisoning from gelsemium are few.

The therapeutic indications for this drug are many, but much of its efficiency depends upon the prescriber and his knowledge of its properties and uses. The occasions for using the drug singly gives opportunity to watch and study its action and control its effect.

Gelsemium is clearly indicated in conditions of exalted nerve function, mental excitation and muscular tension.

In fevers it is useful in the early stages and in active delirium as an antipyretic, promoting perspiration and equalizing the circulation, also relieving nervous irritability and excitement. In the various forms of malaria it assists the action of quinine and relieves its unpleasant effects. In congestion of or in the beginning of acute inflammation of the lungs or pleura it is given for its action on the cerebro-spinal nerve centers governing circulation. In chilly sensations followed by fever, and in hyperemia or acute inflammations of the mucous membranes to relieve the dryness and stiffness, as well as to arrest excessive secretion following, gelsemium acts well, breaking up the fullness and head symptoms of a cold in a few hours. In grippe gelsemium controls the fever, the aches and pains, the cough and restlessness. Combined with strychnia it is simple and effective treatment. The convulsive onset of fever in children, the nervous dentition or other reflex irritations are successfully met by the anti-spasmodic action of gelsemium.

In acute meningitis, especially the cerebro-spinal, in sunstroke, or where there is active cerebral congestion, gelsemium keeps the patient under control and relieves the plethoric condition of the brain and cord.

For pain of a neuralgic or rheumatic character gelsemium is useful where there is arterial excitement, local conges-

tion or malaria. In tic douloureux it comes near being a specific, having a special action on the ophthalmic division of the fifth nerve. The troublesome coccygodynia, a half-dozen cases that resisted every other treatment, yielded promptly to gelsemium. In sciatica of either a neuralgic or inflammatory type gelsemium is useful, not always curative. In ovarian neuralgia and uterine colic gelsemium is a better drug than morphine, being equally as efficient without having any unpleasant effects.

Headaches—neuralgic, congestive or periodical—gelsemium promptly relieves. Headaches at the menopause, with the hot flushes, followed by perspiration, gelsemium relieves both these unpleasant and embarrassing conditions.

Pain from irritation, congestion or tension of the third, fourth, fifth, sixth and seventh nerves or their branches is relieved by gelsemium. It is, therefore, indicated in inflammations of and about the eye, as iritis, keratitis, choroditis, etc., as well as in photophobia.

As a hypnotic this drug is valuable in relieving cerebral excitement and preparing the subject for rest. In combination with sodium bromide it is invaluable in insomnia. In alcoholic exaltation, with mental excitement, delirium tremens and active mania gelsemium is indicated. It is used in puerperal convulsions by the Eclectics as much as morphia and chloroform.

Gelsemium is indicated in muscular spasm of every form—in epilepsy, convulsions and hysteria. It relieves the spasm of the bowel, causing the tenesmus of dysentery, vaginismus of a nervous character, dysuria from spasmodic urethral stricture and spasmodic or functional dysmenorrhea. In all of these gelsemium is superior to opium.

In spasmodic or convulsive cough, in pertussis, in laryngismus stridulus, in hysterical cough and spasmodic asthma gelsemium is a valuable remedy.

Gelsemium is indicated in many pelvic disorders. It relaxes all the sphincters, softens a rigid os and relieves the spurious pains and excitement of a nervous woman in labor. Upon the genito-urinary apparatus gelsemium has a special

action, and is an ideal remedy in gonorrhea to prevent erections and chordee. In spermatorrhea and nocturnal emissions it is prompt and efficient, cutting off all sexual desire, afterward restoring the organs to their normal vigor. In catarrhal cystitis, irritable bladder of women and incontinence of urine from spasm of visceral muscular fibers gelsemium is excellent. In renal calculi gelsemium produces the necessary relaxation.

Lastly, I would suggest that gelsemium might be useful in strychnia poisoning, but as yet my experiments have not been successful in demonstrating it.

The writer is indebted to the following gentlemen for their assistance in the preparation of this article: Dr. E. P. Barnes, Prof. John Uri Lloyd, Mr. W. B. Thompson, Mr. Theo. A. Melter and Mr. Henry Completion.

Society Reports.

MEDICAL AND CHIRURGICAL FACULTY OF THE STATE OF MARYLAND.

CENTENNIAL MEETING HELD AT BALTIMORE
APRIL 25, 26, 27 AND 28.

TUESDAY, APRIL 25—FIRST DAY.

THE 101st annual session of the Medical and Chirurgical Faculty of the State of Maryland was called to order at 8 P. M., with the president, Dr. Samuel C. Chew, in the chair. The invocation was made by his Eminence the Cardinal Archbishop of Baltimore. The Hon. Lloyd Lowndes, the governor of the State, then spoke of the age of this society and what it had done for the State, and then declared the meeting open.

The President's Address.—This was delivered by Dr. Samuel C. Chew (to appear later). After this oration a handsome collation was served.

WEDNESDAY, APRIL 26—SECOND DAY.

On this day the colleges, hospitals and all medical institutions on the east side of the city were open for demonstrations, clinics and inspection. The College of Physicians and Surgeons held, under the auspices of Dr. N. G. Keirle, the director of the Pasteur Institute, a demonstration of the methods employed in the Pasteur

Institute. Since the foundation of this institute, about two years ago, about eighty persons known to have been bitten by rabid animals, have been treated there and not one has died. At the Baltimore University clinics were held by Drs. C. Urban Smith, H. H. Biedler, W. A. B. Sellman and T. Cooke, Jr. At the Johns Hopkins Hospital clinics were held by Drs. Osler, Thayer, Kelly and Halsted.

Cerebro-Spinal Fever.—This was the subject of Dr. Osler's clinic. He showed two cases of cerebro-spinal fever and made a few remarks about the disease. This is in some ways an American disease. It has often been described during the past hundred years, but was first noticed here in this country in 1806, when a very accurate description was made of it, although the year previous some cases had been noticed. The descriptions in this country have been singularly good and much better by country physicians than by city ones. It is essentially a disease of country districts. There are practically three important points in the history of this disease. The first is the discovery of the disease itself. The separation of this disease as a separate entity took place in the early part of this century. This was the first step towards its identification. The second point was the discovery somewhat later by Quincke of the importance of lumbar puncture, and the third point, which soon followed, was the discovery of the specific organism. Clinically, it is a disease of protean magnitude. The symptoms of this disease are singularly diverse. No disease shows such differences, for, as to its duration, no set time can be fixed. Cases may last from six hours to six months. Fatal cases run out in six hours and less, while chronic recurring and relapsing cases may drag along for six months or more. As for the diagnosis, this is not usually difficult, especially in an epidemic or when many cases prevail. In isolated cases, however, the diagnosis is usually very difficult, and it is not easy to differentiate this disease from any other forms of meningitis. Quincke's work of lumbar puncture has helped us to make a diagnosis. The first case presented was a

boy in the seventh week of the disease, and he illustrated one interesting point, and that is the curious intermission. He came in with a temperature of a 104° F. He had been ill with all the characteristic features, such as headache, abrupt onset, vomiting, retracted head, much pain, and in addition there was a very marked erythematous characteristic rash. This rash is now practically gone, but there is no question as to the diagnosis. This was the sixteenth case of cerebro-spinal fever that came into the hospital. Lumbar puncture was performed on several occasions. He showed the fluid from the fifth puncture, and it was about five ounces of turbid liquid. He began to improve rapidly after the puncture. The turbidity of the fluid is a characteristic sign. Cover-slip examinations showed the characteristic organism present. The position of the patient is very characteristic. The slightest movement of the head is exceedingly painful, but he is comfortable as long as he is still. Lumbar puncture has been done on him seven times. The next case was the seventeenth at the Johns Hopkins Hospital and was in some respects also very characteristic. It is a little like typhoid fever. In this case the onset is interesting. It was very abrupt. He was seized with headache and vomiting as he was returning from his work, and he at once showed the characteristic symptoms, such as a stiffening of the head, neck and back and a skin rash. This rash is a very curious one. Each spot is covered with a vesicle and there is a hemorrhage into that vesicle. Lumbar puncture was done on him the next day after admission and the specific organism was found. The patient presents an almost characteristic typhoid condition. Still there are differences which will not deceive the clinician. The head and neck are rigid, which is not common in typhoid fever, and the diplococcus was found. This patient is in the third week of the disease and responds to questions, but his consciousness is often benumbed. There are different forms of meningitis. The serum from the puncture must be carefully studied bacteriologically. There had been in hospital twenty-nine cases, with a careful bacteriological study, and

of these eight were tuberculous meningitis, in eight the pyogenic organisms were present, in eight the pneumococci were found, and there were five in which the characteristic diplococcus was present. These are the four different varieties of meningitis. There are certain marked differences between these four kinds of meningitis. These two are cases typical of the cerebro-spinal fever. In the first place, the onset of cerebro-spinal fever is different from that of the streptococcal or tuberculous variety. The diagnosis is sometimes difficult early in the case until all the symptoms have developed. Soon after the onset there is a pathognomonic skin rash, which is not seen in the other forms of meningitis. It is either a erythema, a purpura or a herpes, and the latter is more frequent. Arthritis is much more common in the true cerebro-spinal fever than in the other forms. The general features are present in all the cases—the cardiac, the pneumococcal, the streptococcal and the cerebro-spinal. In the examination of the blood there is scarcely enough known of the leucocytosis of other forms to draw any conclusions, but in this form the leucocytosis is as great as in pneumonia, the leucocytes running up as high as from 45,000 to 60,000. What is obtained from lumbar puncture is of the most importance. It was done on one case who had been given a whiff of chloroform to keep him quiet. It was easily done. A puncture was made between the second and third or third and fourth lumbar vertebra, about one inch from the spine, and the direction of the needle is a little upward and forward, and it is better to have the patient's back bowed forward. In some cases the fluid runs out very quickly and in other cases it comes out slowly and is collected in a sterile vessel, either in a glass or test tube. If the fluid is turbid it is meningitis, for the cerebro-spinal fluid is normally clear. The meningococcus can easily be demonstrated in the exudate, and it grows very characteristically on Loeffler's blood serum. If the cover slips give negative results the meningitis may be of the tuberculous form. There have been cases for several years past throughout the country, but

it is not at all likely that the epidemics in the various States will be at all general. Even in Boston there have been but 300 cases in three years, and in the Johns Hopkins Hospital there have been but seventeen cases. One diagnostic point is the termination of the disease. There have been six deaths in these seventeen cases. The third case presented was a colored boy, and it was interesting from a diagnostic standpoint. Spinal puncture and his subsequent rapid recovery made the diagnosis clear. Spinal puncture does no harm, and it can be done without any risk at all. One may strike the vertebra and even break off the needle and it makes no difference. The puncture must be low enough to get the fluid. This boy when he came in had a strabismus and marked arching of the neck and was much emaciated. Now he is able to walk and is in every way clear.

Dr. William S. Thayer then made some remarks on "Recent Researches in Medicine" (to appear later).

ASSOCIATION OF AMERICAN PHYSICIANS.

FOURTEENTH ANNUAL SESSION, HELD AT WASHINGTON, D. C., MAY 2, 3 AND 4, 1899.

TUESDAY, MAY 2—FIRST DAY.

THE meeting was called to order by Dr. C. Baumgarten of St. Louis, the president, in the chair, and Dr. Henry Hun of Albany, secretary. Dr. Baumgarten made a few opening remarks, in which he referred to the object of the society being earnest work and where no one cares who is president and who is not. This is a society for the special study of special diseases; it stands for the specialization of labor. It differs from most other societies. Most of the time is devoted to the study of scientific subjects. He referred to the death of Dr. William Pepper and what the society, the public and the University of Pennsylvania had lost in his death.

Dr. J. P. Crozer Griffith of Philadelphia read a paper entitled "Congenital Idiopathic Dilatation of the Colon." There are several causes that may produce it. It may be acquired or congenital. The acquired variety usually comes late in life

or in adult life. There may be an acquired dilatation, oftenest the result of chronic constipation, or there may be a congenital dilatation dependent on some form of stenosis, or there may be a congenital idiopathic dilatation which is one not dependent on any discoverable cause. The dilatation may be at the sigmoid flexure or it may extend further. He gave a variety of causes to which it was not due. There is also a congenital tendency to dilatation when the dilatation itself does not exist at birth. It is not possible to draw a sharp line between these cases. We cannot always say whether this is present at birth or not. He has examined all the cases in literature he could find. He related the history of a case of his. It was a child of five months that suffered from constipation for a week, and then it had diarrhea, and when it was two and one-half years old it was supposed to have swallowed a campaign button, and had no evacuation for a long time, and it was so miserable and in pain that a rectal tube had to be introduced to let the gas escape. It was brought to the hospital for operation. An artificial anus was made and the child grew thinner and died. An autopsy was made at the child's home by its own physician, but it was reported that nothing wrong was found in the colon. He mentioned another case like the first. He thought this was atony of the bowel, but he found extreme dilatation. He had collected twenty-five cases, and had found fifteen to twenty mentioned by other writers. A glance at the histories of these cases shows a characteristic group of symptoms. There was constipation and abdominal distension. Purgatives were sometimes successful in removing this dilatation and sometimes not. In about half the cases constipation was the first symptom noticed, but sometimes there was abdominal distension also. Cases that live more than a year have repeated attacks. During these attacks there is pain and vomiting frequently; in other cases this symptom was absent. Some writers said that the masses were scybalous, but he had found them soft, as a rule, and diarrhea was the terminal symptom. The prognosis was unfavorable. Eighteen out of twenty-

five died. A few reached adult life and only two recovered. In eighteen there were autopsies and one was operated on. In this there was enlargement of the large intestine, and the sigmoid flexure is frequently not the only part dilated. Usually the rest of the colon is dilated also, and sometimes the colon without the sigmoid flexure, and sometimes the rectum. There was a thickening of the walls of the colon in almost every case. Ulceration of the mucous membranes was usually found, especially when there was diarrhea. The diagnosis is easy. The treatment is hygienic and medical. Massage, electricity; empty the bowels; use enemas, but they do not always benefit. Use the rectal tube to remove the gas. Puncture of the intestines is sometimes necessary when the gas distension is very great. Then a trochar is used. Laparotomy is also done. An artificial anus has been made, as in the case of Osler and Halsted, in which the child recovered. Take out the colon and bring the ends of the normal gut together.

Dr. Reginald Fitz of Boston then read a paper on "The Relation of Idiopathic Dilatation of the Colon to Phantom Tumor," in which he spoke of such cases in adults and related a case of his own. He referred more especially to phantom tumor. The phantom tumor is not difficult to make out. Anesthesia is of great assistance in the diagnosis, for under it the tumors of this character disappear at once only to reappear when consciousness returns. He thinks there are two varieties of dilatation—one due to defects of development and hence congenital, and the other makes its appearance weeks or months after birth and may be called idiopathic. The published cases of idiopathic dilatation are few. He spoke of the surgical operations for such cases and how hard it was to go through life with an artificial anus.

Dr. William Osler of Baltimore showed photographs of a series of cases, and said that the case referred to by *Dr. Griffith* in his paper had colotomy done on it by *Dr. Halsted*, and the child when last heard of, which is not very long ago, was alive and well, and not dead as *Rotch* in his "Pediatrics" said. Immediately after the operation the symptoms disap-

peared, the child improved, grew fat and well and within a week had gained many pounds in weight. The second case of his lived for two years and at the time of its death was much emaciated and had recurring attacks of constipation and diarrhea. There was a distension of the colon and a narrowing of the sigmoid flexure and above this a concretion was found. The third case is interesting on account of the few symptoms presented. The child was brought into the surgical clinic for knock-knee, and during the examination the mother said the child had not had a natural evacuation since its birth two years ago. There was a large tumor and much abdominal distension. The child is still alive. The fourth case shows how dilatation of the colon may disappear spontaneously. The patient had heart trouble, with ascites, and with this swelling the dilatation disappeared. The fifth case is now under observation. From the good results in the first case he thought that laparotomy and colotomy should be done early. It is not usually serious.

Dr. A. Jacobi of New York said that a great many cases in which the diagnosis is made have had constipation from the first day of birth. The large intestine may cause it, but there are few autopsies to prove this, but he thinks that there may be an irregular muscular development of the intestines or of the mucous membrane, or there may be a rupture of the intestinal muscles or a diffused hemorrhage between the muscular layers of the intestines.

Dr. Griffith said he tried to avoid the use of the word congenital, but he had to use it. There may be a congenital tendency. We do not expect to find this dilatation at birth because nothing has entered the intestines, but when we find this distension early we think there is some congenital tendency. When this dilatation is delayed it may mean that the tendency is not so well marked. At the autopsies we find hypertrophy of the intestinal walls, and not atony.

Dr. Fitz agreed with *Dr. Griffith* about the meaning of the word congenital, but when it does not appear at one or two years it is too late to call it by that name. Colotomy is only done to save immediate

pain and to save life, but it is not desirable to go through life with an artificial anus.

Dr. James Tyson of Philadelphia related "A Case of Presystolic Mitral Murmur Associated with Systolic Tricuspid Murmur and Jugular Pulse." One feature of this case which is not indicated in the title is that it was complicated by pregnancy, and a careful study was made both before and after the birth of the child. He spoke of the causes and the physics of a presystolic murmur, and thought that such murmurs were most interesting. It was in a married woman who was seven and one-half months' pregnant. She had been ill eight years before and did not know what it was, and two years later she had a miscarriage. For the past five or six years she has had a cough, which disappeared in summer; she was short of breath and had palpitation. Three months before admission to the hospital she is said to have had pneumonia, and has been growing worse. On admission she was thin and pinched and her face was much flushed. She had general bronchial catarrh. She had a peculiar pulse. He described the position of the heart and the apex beat and general outline. There was a short, rough murmur at the apex, terminating abruptly and presystolic in time. He then described the points of intensity of the second sound, and showed some tracings of the position of the heart, the shading to show the position of the murmur, and also he showed the pulse tracing. She became pregnant and felt better, and later she grew livid and was cyanosed, and the forceps were applied at once and the child was delivered, when she felt better and the physical signs changed after delivery. This is just what we should expect. There was a difference in the jugular pulse and a diminution in the intensity of the murmur. There is no edema. There was hypertrophy of the left ventricle. He brought forward various theories to explain this change.

Dr. E. G. Janeway of New York said that one thing he had noticed, and that was that in about one-third of the cases this murmur could be heard behind. This is not supposed to be the case. It is not as loud or as characteristic as the mitral regurgitant murmur, but it is clear; but

he has noticed that cases put down as one kind of murmur in hospital often came back to another service and were diagnosed differently, and shows the true state of the heart, but the records contradict this. Often when the ventricle is dilated and the liver engorged there is a systolic murmur, but when the liver is reduced this murmur disappears and the presystolic murmur comes back. It is much like the pulmonary murmur as to position.

Dr. Charles Carey of Buffalo said, in referring to *Dr. Janeway's* remarks, that the transmission behind of the murmur may be due to a pulmonary condensation. It is rare to get a deformed auricular-ventricular orifice produce a condition that would not cause trouble both forwards and backwards, that is, a stenosis and a regurgitation.

Dr. Griffith said that three or four years ago he had read a paper before this association in accord with what *Dr. Janeway* had just said, and he had noticed that the text-books said nothing about this condition, except, perhaps, the older books.

Dr. Tyson said, in conclusion, that he had thought most highly of *Dr. Griffith's* paper and had it in mind when he reported this case, and he had often noted what *Dr. Janeway* mentioned. The murmur is much louder at the apex, even if it can be heard elsewhere.

SODIUM GLYCERINOPHOSPHATE IN NERVOUS AFFECTIONS.—According to *Merck's Archives* Kahane has used sodium glycerinophosphate with excellent results in functional disturbances of the nervous system, such as neurasthenia, hysteria and feeling of anxiety, and also in nervous affections of anemic origin. The author found no disturbing by-effects to be caused even by long-continued use of the remedy, while an invigorating tonic effect is exerted on the nervous system. He gave the remedy in the form of a solution containing five drachms of sodium glycerinophosphate, ten fluid drachms each of distilled water and orange-flower water and four fluid drachms of syrup of orange peel, a teaspoonful being given thrice daily.

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BALTIMORE, MAY 6, 1899.

In the March number of the *Bulletin of the Chicago Health Department* there is an important communication
The Micro-Organism from Dr. William J. of Scarlet Fever. Class, an inspector of the department, which deals with the perplexing problem of the etiology of scarlet fever. By following a new procedure along established lines of bacteriological technique Dr. Class has been able to demonstrate a diplococcus which has apparently hitherto escaped the notice of investigators. Whether this is really the cause of the disease can, of course, only be decided after further study and observation, but the fact is worthy of especial notice.

The culture media used was a glycerine agar to which 5 per cent., by weight, of black garden earth had been added. When this was inoculated with the scales or from the throat of typical cases there appeared in from forty-eight hours to a week a grayish-white, semi-transparent growth. The colonies are separate at first and subsequently coalesce. They are glutinous and draw out into long threads when removed by an oese. They were grown at 35° C. There was a feeble growth on blood serum and a growth in milk which was unchanged. There was no growth on the other ordinary culture media.

The morphology of the organism is not unlike a large gonococcus, and the older growths showed another line of division, giving them the appearance of tetrads. They were grouped in bunches and occasionally were seen singly or in chains. They stain with the ordinary aniline dyes and decolorize by Gram's method, though not to the same extent as the gonococcus.

Subcutaneous injections of the pure culture produced no results; in other words, this is not a pus-producing organism. By injecting the culture into the ear veins of swine he produced a disease closely resembling the disease as observed in the human being. From the blood and scales of this inoculated animal he was able to again isolate the diplococcus.

This organism was found in thirty typical cases of scarlet fever and also in the throats of several individuals who were living in the same house with a case and who at the time showed no symptoms of the disease, but who developed it later on.

It is to be hoped that these experiments will be closely followed by other bacteriologists and that some definite and conclusive results may be reached.

* * *

THE centennial of the Faculty is a thing of the past, and already now the State Society has entered on the second century of its existence. To say
The Faculty's Centennial. that this meeting was a success is expressing it in feeble terms. From the opening evening, when the president delivered, with such power, his carefully-prepared address, to the closing day there was hardly a fault noticeable. It is difficult just now to estimate the number of physicians from outside of the city and from outside of the State, but it was the largest attendance the Faculty has ever had and its influence is being felt in the formation of county societies all over the State. Then the Faculty was strengthened by the addition of over 100 new members.

The exhibitions of portraits, relics and books was rather unique, and these, together with some of the addresses, attracted a large number of persons who were not physicians. Some of those present at the banquet resented very strongly the graded quality of wines served at the banquet, those at the head table receiving a better kind than the others, but that will soon be forgotten, while the great success of this meeting will long be kept in remembrance.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending April 29, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	..	..
Cerebro Spinal Meningitis.....	3	4
Pneumonia.....	..	16
Phthisis Pulmonalis.....	1	13
Measles.....	15	..
Whooping Cough.....	3	..
Pseudo-Membranous Croup and Diphtheria. }	19	3
Mumps.....	..	..
Scarlet Fever.....	10	..
Varioloid.....	..	..
Varicella.....	6	..
Typhoid Fever.....	..	..

Dr. Marcus W. Allison of Hagerstown is dead, aged fifty-six.

Dr. C. L. Charters of Norfolk and formerly city coroner died last week. He received his degree at the University of Maryland in 1889.

Dr. John D. Starry of Charlestown, W. Va., died at his home last week. He was born in 1821 and received his degree at the Jefferson Medical College in 1847.

Dr. Albert S. Atkinson announces that the annual meeting of the Maryland State Homeopathic Medical Society will be held May 16 and 17 at the society's hall, 16 West Saratoga street, Baltimore.

Drs. B. A. Muse and Haughton Bayley have been lecturing at the Y. M. C. A. Hall on "Physiology" and "First Aid to the Injured." At the conclusion of their lectures Dr. E. A. Munoz held an examination.

In the suit of Dr. J. Horton Kelly of Chesertown against the Baltimore & Delaware Railroad the court refused the fee on the plea that Dr. Kelly was only summoned by an official of the road and therefore the road is not responsible. The services were nevertheless rendered and accepted.

The next meeting of the Mississippi Valley Medical Association will be held in Chicago from October 3 to 6, instead of in September, as was formerly announced. The autumn fete, to be known as the American Festival, will be held in Chicago from September 25 to October 9, and tickets to Chicago from all points will be sold at the rate of one fare.

The Faculty of the Baltimore Medical College has announced the following changes in the staff of physicians of the Maryland General Hospital: Dr. James C. Lumpkin, resident physician; Dr. Thomas E. Murray, first assistant; Dr. E. H. White, second assistant; Dr. J. Walter Fairing, third assistant, and Dr. S. Kennard, resident physician of the Maternity Hospital.

The directors of Bayview Asylum and Almshouse have reappointed Mr. Louis Zinkhan superintendent for the ensuing year. The following medical staff was also appointed: Dr. J. W. Holland, chief resident; Drs. Samuel Edwards, E. A. Knorr, T. L. Boyer and H. J. Simpers, assistants. Under Mr. Zinkhan's management the institution is now a model one. There are 1194 inmates at present.

Rectal specialists will be glad to know that at the time of the meeting of the American Medical Association at Columbus, June 6 to 9, there will be a meeting of the medical men engaged in the practice of proctology for the purpose of effecting a permanent society for the study of their specialty. Physicians interested in the project are requested to address Dr. Wm. M. Beach, 515 Penn avenue, Pittsburgh, Pa.

Programme of the first meeting of Rectal Specialists at Columbus, Ohio, June 6 to 9, 1899: "The Importance of Giving Rectal Diseases Special Study," Jos. M. Mathews, Louisville; "Pruritus Ani," Jas. P. Tuttle, New York city; "Surgical Treatment of Non-Malignant Stricture of the Rectum," Joseph B. Bacon, Chicago; "A Modification of Whitehead's Operation for Hemorrhoids," Samuel T. Earle, Jr., Baltimore; "The Proctoscope as a Factor in the Diagnosis and Treatment of Simple Ulceration of the Rectum," Leon Straus, St. Louis; "A Consideration of the Various Forms of Ulceration of the Rectum," Lewis H. Adler, Jr., Philadelphia; "Rectal Carcinoma—Excision and Subsequent Colotomy," B. Merrill Ricketts, Cincinnati; "The Limitations of the Kraske Operation," Charles C. Allison, Omaha; "The Act of Defecation," Thomas Charles Martin, Cleveland; "Constipation Considered from the Standpoint of the Proctologist," A. Bennett Cooke, Nashville; "Paper and Exhibition of New Instruments," S. G. Gant, Kansas City; "Rectal Adenomata," William M. Beach, Pittsburgh.

Washington Notes.

Acting Assistant Surgeon Frank Roberts has been ordered to Marshall, N. C.

Surgeon J. M. Steele has been ordered to duty at the recruiting rendezvous at Baltimore.

Acting Assistant Surgeon Clarence H. Long, U. S. A., has been ordered to Havana, Cuba.

At the meeting of the Washington Medical and Surgical Society Monday evening Dr. N. P. Barnes read a paper upon "The Physiology of the Neuron."

Assistant Surgeon W. N. Garton has been detached from the Naval Hospital at New York and ordered to the Naval Academy, relieving Assistant Surgeon S. F. Palmer, who is ordered home.

At the District Medical Society Wednesday evening Dr. S. S. Adams reported three cases of lumbar puncture; Dr. J. S. Stone (1) "Fibroid Tumor, Case and Specimen;" (2) "A New Instrument, the Angiotribe."

The fourteenth annual meeting of the Association of American Physicians convened Tuesday morning at the Arlington. Dr. G. Baumgarten delivered the introductory address. The session will end Thursday night.

The lady managers of the Garfield Memorial Hospital gave their annual planked shad dinner at Marshall Hall Thursday, April 26. Music was furnished by the United States Marine Band. The ladies realized a neat sum from their excursion.

Major William L. Kneeder, brigade surgeon, U. S. V., captain and surgeon, U. S. A., has been honorably discharged from the volunteer army. He has been relieved from duty at Pinar del Rio, Cuba, and ordered to his station, West Point, N. Y.

There were 1309 casualties among the United States troops in the Philippines from February 4, the beginning of the insurrection, to April 28, the day overtures for cessation of hostilities were made. Of the casualties 198 were killed and 1111 were wounded.

Miss Eva Simonton, for the past three years superintendent of the Central Dispensary and Emergency Hospital, has resigned her position to accompany a prominent New York family on a European trip. Miss Simonton is a graduate of the Blockley Hospital School and is a very competent manager.

Book Reviews.

THE NATURE AND THE CONSEQUENCES OF ANOMALIES OF REFRACTION. By F. C. Donders, M.D., Late Professor of Physiology and Ophthalmology in the University of Utrecht. Revised and edited by Charles A. Oliver, A.M., M.D., Surgeon to the Wills Eye Hospital, etc., Philadelphia. With Portrait and other Illustrations. Price \$1.25. Philadelphia: P. Blakiston's Son & Co.; Baltimore: Cushing & Co.

In the publication of this little volume Dr. Oliver has not only conferred a richly deserved honor upon an illustrious man, but, in the doing thereof, has greatly honored himself and his profession. We can never hope to discharge the great debt of gratitude we owe Professor Donders, but it is greatly to be desired that the editor may achieve his purpose of according Donders' writings a greater number of readers and a larger field of usefulness than they have heretofore enjoyed. We have thought for a long time that some one ought to publish a new edition of Donders' complete work on "Refraction and Accommodation," for it is with the greatest difficulty now that one can secure a copy of the limited English edition published by the Sydenham Society, and we hope this will yet be done. Though issued thirty-five years ago, that book is today one of the most useful in the ophthalmologist's library.

In the publication of this essay, however, Dr. Oliver has offered us a work that every ophthalmologist will read with pleasure and profit, for though he may, through other sources, have become thoroughly familiar with the principles established by Donders, still their review will be of value.

We want to express our appreciation, too, of the manner in which the publishers have accomplished their part of the work. The type is large and clear, the paper excellent and the binding a triumph of the bookbinder's art.

REPRINTS, ETC., RECEIVED.

The Therapeutics of Benzozol. By George Frank Butler, Ph.G., M.D. Reprint from the *American Therapist*.

The Radical Treatment of Hypertrophied Prostate by Electro-Incision; Demonstration of the Freudenberg-Bottini Incision; Report of Cases. By Bransford Lewis, M.D. Reprint from the *Philadelphia Medical Journal*.

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Original Articles.

THE LIMITATIONS OF CONSERVATIVE SURGERY OF THE FEMALE GENERATIVE ORGANS.

By George Ben Johnston, M.D.,

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MUTILATION of human parts is abhorrent. Every organ has a right to exist until pathological processes destroy its function, put it beyond repair or constitute its presence a destroyer of health or a menace to life.

Conservatism in pelvic surgery contemplates repair of diseased but redeemable structures, with abatement or removal of morbid conditions, restoration of function, relief of suffering and saving of life. The mere recovery from operation does not constitute success. The test should be relief of symptoms.

Surgical discretion is a rare gift. Clean hands, operative skill and a good technic are common. Thus unnecessary ablations continue because they can be safely accomplished and because unripe operators lack that discernment and judgment without which one is unable unerringly to decide when radical methods should give place to milder ones.

Conservatism must accomplish all that radicalism can and more in restoring the integrity of parts without sacrifice. Failing in this, or when extended beyond safe and legitimate bounds, conservatism may become rank radicalism. It is desirable, therefore, to fix its limits as accurately as possible, seeing how variable are the conditions involving its application. Every

discreet surgeon enters the pelvic cavity prepared to alter his preconceived plan if unexpected conditions arise. In the selection of a final method in such cases as admit of conservatism he will be governed by (1) the age of the woman, (2) the nature of the malady, (3) the extent of the lesion and the existence of complex pathological states, (4) the patient's physical condition, (5) the probable necessity of a second grave operation.

Age of the Patient.—To a woman during the child-bearing period the preservation of the uterus and at least one tube and ovary (or even a portion of the latter) should be accomplished if it can be safely done. Nothing but positive necessity can justify the unsexing of such women. They constitute the peculiar charge of conservative pelvic surgery, and greater latitude is allowed on account of the importance, for every reason, of their generative organs. Here such measures as carry with them the likelihood of failure and even some risk to life may be resorted to in their behalf.

To one approaching the menopause the argument in favor of conservatism is less forcible, but even here it is most desirable to avoid the sudden cessation of the menstrual flow, if it can be avoided. To one past the menopause the ovary alone seems (on account of its internal secretion) to be important, save for the minor consideration of the mechanical advantage of preserving the uterus.

The Nature of the Malady.—It is obvious that no attempt at conservatism should be made in cases of malignant neoplasms, tuberculosis or suppurative diseases of the tubes or ovaries due to the more malignant pyogenic organisms.

The Extent of the Lesion and the Existence of Complex Pathological States.—

Even where most extensive involvement of an organ exists there may remain a small unaffected portion whose preservation would be desirable, but the difficulties connected with identifying and isolating such a healthy portion in the presence of extensive disease are great, and often determine in favor of radical procedure. Not infrequently upon exploration of the pelvis it is found that the condition for which operation was undertaken is so complicated by other pathological states that the mode of procedure originally contemplated must be abandoned for more radical measures. Thus uterine fibroids may give rise to conditions of the tubes and ovaries necessitating their removal. In such a case little would be gained by saving, at the expense of a tedious operation, a uterus which would at best be a functionless organ.

The Patient's Physical Condition.—Conservative measures, as a rule, involve more extensive manipulations than do radical procedures, hence the latter must at times be adopted where the local conditions would suggest conservatism, but where the patient would be unable to stand the prolonged anesthesia and the shock incident to tedious operative measures.

The last of the above considerations—the possible necessity of a second operation—can best be illustrated by one of several cases which have recently come under my observation, and the like of which are constantly met with by pelvic surgeons:

Mrs. ———, aged forty-seven years, mother of four children. After birth of last, sixteen years ago, without any acute illness, she became a confirmed invalid, unable to undergo any exertion and confined to bed most of the time, her longest walk being from her bed to lounge. Four years ago she consulted a surgeon, who discovered a lacerated cervix and perineum, which he repaired. Her symptoms not improving, one year later she again placed herself under his care and was treated for six months with local applications, but without benefit. Two years ago she consulted another surgeon, who performed a laparotomy and removed a cyst

of one ovary, a hematoma of the other, six myomata (by six separate incisions), and performed a suspension of the uterus.

These conservative measures not affording relief, I was called to the country to see the case last August. Upon examination, the uterus was found fixed by the operation of suspension, the ovaries and tubes matted together by dense adhesions, and all of the pelvic organs exceedingly painful. I advised radical operation, and this was consented to. Upon exploration of the pelvis, after abdominal section, the omentum for about the space of a hand was found adherent along the line of the previous abdominal incision. The uterus was firmly suspended by a strong false ligament and adherent to both the bladder and rectum. It contained three fibroids. Tubes and ovaries were bound down by dense adhesions. The right ovary, from which the cyst had been previously removed, contained several cysts of various sizes, and the left contained a hematoma the size of a hickory nut. Both tubes were the seat of follicular hydrosalpinx. I proceeded to break up the adhesions and performed an oöphoro-salpingo-hysterectomy.

This case made a perfectly satisfactory recovery. On the seventh day after operation she volunteered the statement that she realized that the cause of her illness had been removed, and that she felt she was cured. At the end of the third week she was out of bed and one week later was able to walk better than at any time since the beginning of her illness, sixteen years ago. She is now cured.

In considering the desirability of conservatism in any given case account must be taken of the relative importance of ovaries, uterus and tubes. Of these structures the ovary occupies the first place, for the reason that its removal renders uterus and tubes functionless, while, on the other hand, removal of the latter leaves the ovary robbed of its prime function, but serving other useful ends. Next in importance stands the uterus, but only, so far as we know, where at least a portion of an ovary can also be preserved. Efforts to preserve tubes alone are not desirable, since these structures are func-

tionless in the absence of ovaries and uterus.

Though only within very recent years has it been conclusively demonstrated that the internal secretion of the ovary is of great importance in the female economy, and strongly suggested (though not proved) that the function of menstruation is more than a monthly inconvenience, still not even these most convincing arguments against the unnecessary removal of the organs concerned are stronger pleas for conservatism than is the moral question involved and the often lamentable mental condition following the unsexing of a woman. This latter consideration is more powerful than ordinarily considered, for women are naturally loth to express themselves freely in matters bearing on sexual relations.

Admitting the wisdom of and justifying the attempt made to defend and restore every pelvic structure presumably capable of regeneration, I may lay down some rules which will fix the limits of our efforts to restore to function and health in the common maladies coming to our notice.

THE OVARY.

Hematoma.—When large, painful and producing reflex nervous symptoms and occupying the bulk of a single ovary, removal of the organ is required.

Graafian Cysts.—If these be numerous and apparently involve the entire ovary ablation is to be practised. Their removal by dissection means many cavities to be closed by much suture material, the possibility of blood clots, supplying foci for infection, and, later on, painful cicatrices and no amelioration of the symptoms produced by the cysts.

Abscess.—If large and centrally located, its removal intact is demanded. Its incision and drainage mean possible direct infection and peritonitis, the probable invasion of the parts sought to be saved with recurrence, and failure to rescue any useful portion of the gland. The urgency of complete removal is enhanced in the presence of systemic infection.

Dermoids.—Unless both ovaries are implicated, dermoids should be treated by complete removal. Even when both organs are affected it may be safer to be

radical, inasmuch as these tumors are prone to destroy the organ and likewise to set up an inveterate form of local peritonitis with the formation of painful and dangerous adhesions, which inflammation is only cured by ridding the patient of the diseased parts.

THE TUBES.

The uterine tubes should be amputated in:

Extrauterine pregnancy, whether ruptured or unruptured, if the tube is much enlarged and altered.

In *kinks and strictures* if these are numerous, decided and accompanied by dense adhesions, because having established by operation the perviousness of the lumen under such conditions, it cannot by any means at our command be maintained, and may be followed by either hydro- or pyosalpinx.

In *hydrosalpinx* of either the follicular or flowing variety, for the reason that the naked eye cannot define the limits of the former, and the latter will yield to no other treatment. In simple hydrosalpinx if the tube is greatly distended, its walls much thinned and in the presence of adhesions.

In *pyosalpinx* in every instance where the infection is other than gonococcal, and in these if the abscess cavity is large and the tube walls much impaired. Indeed, attempt to save a suppurating tube is rarely justifiable.

THE UTERUS.

I shall speak only of the application of operative measures to *fibroids*.

Myomectomy was a great advance in the treatment of fibroids. It seems horrible to sacrifice an otherwise normal uterus on account of the presence of removable fibroids, yet unnecessary hysterectomies continue.

Perhaps the most difficult problem in determining between conservatism and radicalism presents itself when the surgeon comes to deal with fibroids. There are two conditions, which, if existing, lead to a speedy conclusion. The presence of a limited number of only subserous tumors at once indicates the removal of the tumors only. On the other hand, if the tumors are deep-seated, or embrace the bulk of the uterus, or if they

are very large, nothing is to be done but hystero-myomectomy.

The doubtful cases are those in which the tumors are interstitial and small. Even here, when few and well defined, myomectomy may be undertaken with reasonable hope of success.

The difficulty of distinguishing *every* nodule is very great, and where the number is large the numerous and deep incisions required for their extirpation render the operation for their complete removal tedious, dangerous and uncertain. I therefore contend that in every case at all doubtful, *except when they occur in young women*, hysterectomy is preferable to incomplete myomectomy. Overlooking and leaving a single nodule may destroy the permanent effect of the operation and require a second of a more thorough kind.

The presence of complications, such as the coexistence of pathological conditions in two or more organs, usually places the case beyond conservatism, as may the existence of disease in remote organs.

While conservatism properly applied is both wise and humane, to be tolerated it must accomplish what it seeks to do. In its application the soundest judgment, the ripest experience and consummate skill must be present. The difficulties which encompass it are great.

1. It often entails prolonged effort, thus increasing the liability to shock.

2. Extensive manipulations which denude the perineum, thereby increasing the risk of infection and setting up post-operative adhesions, and, may be, intestinal obstruction. By dealing with open pus cavities, grave danger of infection occurs. It often requires many wounds, which mean much hemorrhage, numerous cavities to be repaired, foreign suture material left behind to accomplish these repairs, the possible formation of blood clots, which furnish foci for infection, a likelihood of secondary hemorrhage, perhaps painful scars, and almost certainly, when many points have been subjected to operation, post-operative adhesions.

3. The bruising of tissues incident to harsh methods of controlling hemorrhage, thereby impairing the recupera-

tive powers and thus endangering the success of the undertaking.

4. Finally, the ever-present prospect of a second operation.

THE TONSILS AS A MENACE TO THE ORGANISM.

By John R. Winslow, M.D.,

Baltimore, Md.

READ BEFORE THE BALTIMORE MEDICAL AND SURGICAL ASSOCIATION, APRIL 10, 1899.

THIS subject is presented intentionally in outline in the hope of evoking elaboration from the rich experience of our members. The present discussion has no reference to the deleterious influences exerted by hypertrophied tonsils upon the general health, either by obstruction of respiration, by the production of chronic inflammatory conditions in adjacent tissues or by reflex influences upon remote organs, but we propose to consider the action of the tonsils as the primary portals of entry of infectious disease into the organism. Although referring more particularly to the faucial tonsils, the facts that have been deduced have a similar, though more limited, application to all those masses of identical lymphoid tissue constituting Waldeyer's lymphatic ring, variously termed the faucial, the pharyngeal and the lingual tonsils.

Consequent upon the demonstration of Stöhr that a large number of lymphocytes, derived partly from the adenoid tissue and partly from the blood, are continually wandering out from this lymphatic ring, it has long been assumed that in virtue of the phagocytic action of these cells the tonsils serve to protect the organism from infection. The situation of these organs at the very entrance to the respiratory and the digestive tracts would seem to confirm this belief. Thus Gerhardt termed the tonsils a physiological wound guarded by leucocytes, which during health protect the system against the entrance of germs. The existence of some such protective mechanism would seem imperative, since nearly every form of micro-organism has been demonstrated upon the surface of the tonsils in health, being separated from the lymph spaces

by a single layer of epithelial cells, in many places loosely arranged.

Based upon elaborate experiments, Hodenpyl in 1891 expressed the conviction that the normal tonsils under normal circumstances absorb neither fluid nor solid matter, and are impermeable to bacteria.

The faucial tonsil is, however, normal only in infancy, and many authorities regard every visible tonsil as hypertrophied. The pharyngeal tonsil can be neither seen nor felt, if normal; any palpable mass, even when slight, being pathological. Structurally, both macroscopically and microscopically, the tonsils would seem eminently adapted for absorption. Observant physicians soon noticed the promptness with which glandular infection followed inflammatory conditions of the tonsils. As early as 1893 Robertson, from his clinical experience, expressed the opinion that 98 per cent. of cases of cervical adenitis were due to infection through the pharyngeal tonsil and to be treated through it. No experimental basis for this view existed, however, at this time.

In 1898 Goodale, in what has been termed one of the most valuable contributions to laryngology of the year, demonstrated by means of carmine injected into the tonsillar crypts that absorption occurs through their lining membrane. Hendelsohn, subsequently but independently, proved by means of powdered dyes blown upon the surface of the tonsils that absorption occurs rapidly, and concludes that they not only do not protect the body, but that they afford entrance to numerous infections both local and general. Pluder, after an elaborate discussion, concludes that a protective barrier that is not only inefficient, but which, owing to its superficial defects, directly favors the entrance of pathogenic material, is a gift of nature of questionable advantage. Suchannek regards the palatal tonsils as the most important of all the portals of entry of infectious disease. Beckmann terms adenoid hypertrophy the turning point of all respiratory and aural diseases in children.

We need only review our own experience to recognize how often the palatal tonsils are the entrance point for various infections, especially in children. We

have known for a long time that an acute angina does not constitute a purely local affection, but that it can serve as a point of departure for acute infections of other parts. A recent writer has termed the acutely inflamed tonsils a "hotbed for infection."

Streptococci and staphylococci are normally present in the crypts of the tonsils, but are not absorbed as long as the tonsil is healthy.

Not every acute tonsillitis means a general infection, but under certain circumstances (cold, epidemic) these micro-organisms penetrate the tonsils and enter the blood. There is locally provoked a parenchymatous inflammation, with proliferation of leucocytes, which may or may not be accompanied by visible hypertrophy. This inflammation usually terminates in a few days, but may culminate in the formation of true abscesses, which are found in the substance of the tonsil. These may coalesce and open on the surface of the tonsil, or may become encapsulated and flattened, so that they cause no swelling of the tonsil and thus escape the observer's eye. But, whether acute or chronic, the germs of these abscesses can extend to neighboring organs or penetrate directly into the blood. Thus apparently normal organs may contain dangerous foci of infection. On this account Jessen insists upon the necessity of aspirating from the interior of the tonsils in making bacteriological investigations for diagnosis, and not relying upon surface cultures.

These chronic abscesses of the tonsils may exist without causing any symptoms until the onset of an acute angina reawakens the affection. Extension may then occur by the lymphatic or the vascular system. In the first case, we have phlegmon of the thoracic cavity and pleura; in the second case, the germs penetrate a vein and cause septicemia or pyemia. Treitel records three cases of general infection following chronic abscess in tonsils of normal volume, the diagnosis being impossible during life.

Septic infection of cryptogenetic origin may follow angina without abscess. Richardiere describes a case of suppurative pleurisy following a non-suppurative tonsillitis. Hanot and Heddaeus re-

port two cases of non-phlegmonous anginas, followed by pleurisy, sepsis and death, in which they demonstrated, respectively, staphylococci and streptococci on the tonsils and in the pleural exudate. Lermoyez reports a case of membranous streptococcus angina, followed by purulent pleurisy and fatal pericarditis. Wainwright reports the case of a 17-year-old girl with tonsillitis, followed by purulent inflammation of the wrist joint and phlebitis of the vena saphena; death in four days despite the use of antistreptococcus serum. Machol records a case of septicemia having the pharyngeal tonsil as its point of departure.

Diphtheria is a typical and generally recognized example of an acute infection occurring through the tonsils.

Scarlatina is believed by many to enter the system by this route, and although its bacteriology is uncertain, yet the almost invariable angina that precedes this affection is very significant. Hutinel and Deschamps have demonstrated that children with adenoids are particularly liable to scarlatinal nephritis.

Acute articular rheumatism was one of the first diseases recognized as a systemic infection occurring through the tonsils. Trousseau in 1866 called attention to this relation, which has since been established by Buss, Suchannek, Bloch, Fowler, Jacoud and many others. Peltessohn regards rheumatism as an attenuated septic mixed infection, whose invasion is facilitated by certain pathological conditions of the mouth and nose. Stoffel's case of recurrent rheumatism and severe angina, in which after methodical care of the throat the articular affection vanished with the angina, is most suggestive. Roos states that in many cases the rheumatic poison passes through the tonsils without notable irritation, and the symptoms do not differ notably from other anginas. The common form is the follicular.

Pneumonia is a less frequent sequel of angina than pleurisy. Pneumococci are found on the surface of the tonsils, and some claim that they are constantly present. Stoos in 1895 first demonstrated the presence of Friedländer's bacillus in a case of acute angina, a fact since confirmed by numerous other observers. Gaultier ("Thèse de Paris," 1896) de-

scribes five varieties of angina caused by pneumococci: Purulent, erythematous, follicular, pseudo-membranous, herpetic. The angina may be mild or may be followed by general infection.

According to Buttersack, the bacilli penetrate the adenoid tissue, especially the tonsils, and are arrested in the cervical glands; if they pass this chain they are then deposited in the bronchial glands. In case of further development, after swelling of these glands, they enter the centripetal lymph stream and are probably next deposited in the pleura. Jensen reports a case of first angina, then chest symptoms, pericarditis, double pneumonia and general sepsis. Beginning with the tonsils both during life and post-mortem, all of the organs contained the same organism—staphylococcus aureus. The tonsillar symptoms are very transient, and may escape the notice of a careful and skilled observer, so that the writer believes streptococcus and staphylococcus pneumonia of tonsillar origin to be more common than is generally credited.

Tuberculosis is the most common chronic infection that enters the system through the tonsils. Since Strassman's investigations we have known that the tubercle bacillus can enter the faucial tonsils or penetrate the same without symptoms and infect the cervical lymph glands. Subsequent investigations have established that this is by no means an infrequent occurrence. Gottstein reports from the clinic of Professor Stoerck 10 per cent. tubercular tonsils. As Dmowski first showed, these tonsils present no visible changes during life by which they can be discovered. Their detection is entirely a matter of systematic microscopical examination, by which we discover giant cells and tubercles, but, as a rule, no caseation nor tubercle bacilli. They thus constitute latent foci of infection. They were found in persons with no detectible pulmonary lesion. To Lermoyez we owe the first record of tuberculous infection of the pharyngeal tonsil. As in the former case, these are only detectible after the most systematic microscopical investigation, to which may be due, as Brindel points out, the marked variance of statistics.

Gottstein found 12 per cent. of tubercular adenoids in Stoerck's clinic; Brindel found 12 per cent. of tubercular adenoids in Moure's clinic; Gourc found among 201 cases none tubercular. Infection usually occurs from the inspired air, but may be caused by the food. Bicaud regards adenoid vegetations as the commonest entrance point for tubercular affections. Gallois and others regard the syndrome of symptoms which we term scrofula as being in many cases due to tubercular adenoids, which would seem to be borne out by their disappearance after removal of the growths.

In the light of the preceding clinical and pathological experience it would seem that we must modify our views and practice with regard to these organs. Heretofore we have directed treatment mainly toward the relief of conditions resulting from hypertrophy. Many of these tonsils were not enlarged, and some were even atrophied; all were, however, diseased to the extent of presenting irregular surfaces, with deep crypts. Some of the adenoids were not hypertrophied sufficiently to obstruct respiration, but were chronically inflamed.

Treatment consists in prophylactic destruction of the diseased tissues. Adenoids should be radically removed with the curette and finger-nail. Inasmuch as absorption occurs through the follicles of the tonsils, these should be replaced by scar-tissue. The ideal operation is electro-cautery—dissection of the entire tonsil from its capsule, as advocated by Edwin Pyncheon of Chicago; at times igni-puncture of the crypts with the pointed electrode may be preferable. Least suitable is the tonsillotome, and when it is employed it should probably be supplemented by some procedure to close the open mouths of the tonsillar crypts.

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Society Reports.

MEDICAL AND CHIRURGICAL FACULTY OF THE STATE OF MARYLAND.

CENTENNIAL MEETING HELD AT BALTIMORE
APRIL 25, 26, 27 AND 28.

DR. WM. S. HALSTED then exhibited some cases of hernia on which he had operated, and spoke of his method, and he also showed some cases of mammary cancer, in which the breast had been removed, and explained also his method of cleaning out the axilla and removing much of the pectoral muscle.

Dr. Howard A. Kelly then gave a very skilful demonstration of the examination of the rectal mucous membrane and of the large part of the lower intestinal tract by the use of the light and a rectoscope. He also demonstrated very beautifully the ease with which he examined the female bladder and catheterized the ureters. He put the woman in the extreme knee-elbow position, let air into the vagina, otherwise the bladder will be ballooned; then put a little cocaine into the urethra

and gently dilated with a bulb passed inside of a cystoscope. After the entrance into the urethra was made the bulb was withdrawn and the cystoscope passed in, and the bladder at once was plainly seen. The inside could be studied on all sides, the residual urine seen and withdrawn. By turning the cystoscope to one side or the other the entrance of the ureters could be seen, and either one could be catheterized at will.

In the other laboratories of this hospital demonstrations were held. After luncheon in the hall of the Faculty the afternoon session began with the scientific papers. Dr. E. G. Janeway, who was announced to read a paper, was prevented at the last moment from coming.

Dr. Hermann Knapp of New York then read a paper on "Some Landmarks in the History of Ophthalmology" (to appear later.)

Dr. George Ben Johnston of Richmond, Va., read a paper on "The Limitations of Conservative Surgery in the Female Generative Organs" (see page 299).

Dr. W. W. Johnston of Washington read a paper on "J. Hughes Bennett; His Services to Medicine," (to appear later.)

Dr. Samuel Alexander of New York, who was to have read a paper on "The Management of Vesical Calculus in Prostatitis," was unable to be present.

On Wednesday evening, in McCoy Hall, Dr. W. W. Keen of Philadelphia delivered the annual oration on "The Debt of the Public to the Profession." Dr. Keen stated that it was an easy task to show how much the profession had done for the community, aided by sanitary engineers and also by the legislators. He then enlarged in turn on some of the most terrible and fatal diseases that formerly were constantly dreaded, and the discoveries made by which these diseases had been either stamped out of the civilized world or had been shorn of their terrors. The plague, cholera and typhus fever, all of them diseases of filth and overcrowding, were in past times frequent and deadly visitors in European countries, but in this country sanitation and quarantine had been so effectual that in civilized countries the plague is unknown, typhus fever is almost unknown,

and since the deadly epidemic of cholera in Hamburg in 1892 it has been practically proved that a proper system of filtration would render such a visitation impossible. The same precaution would also place typhoid fever among the infrequent diseases, but unfortunately the public has not yet listened to the voice of sanitary physicians. During the last century no disease was more dreaded than smallpox. It invaded the homes of the high and the low, and left either death or marred countenances in its path, but vaccination, one of the greatest gifts to mankind, has rendered that pestilence harmless. Yellow fever has been driven from the Northern cities of this country, and with Cuba under our control, the disease may be attacked at its source. Scurvy, the pest of armies and jails and hospitals, has long since been conquered. The most noteworthy feature of modern medicine is the introduction of laboratory methods in the study of diseases, and although so far the hoped-for results in the cure of disease have not yet been accomplished, as in the case of tuberculosis, yet it has enabled the disease to be positively determined at a much earlier stage than formerly, thus leading to a cure before it is too late. The pathological study of diphtheria, hydrophobia, trichinosis and many animal diseases has also yielded great and important results. The two epoch-making discoveries in the history of medicine, however, are those of anesthesia and antiseptics. Without the first surgical operations were always horrible and often impossible, while the second has prevented the often terrible after-effects, such as erysipelas, tetanus, gangrene and blood poisoning. Dr. Keen warmly commended the bravery of the profession as shown in times of war and epidemic disease, and the generosity which constantly gives time and skill to the sick poor for little or no remuneration. In closing Dr. Keen asked if the public might not repay this great debt by a scriptural tenth, not for the pockets of the physicians, but for the hospitals, colleges, to equip libraries and laboratories; not for the physicians, but for humanity.

Immediately after this oration several receptions were held. Drs. Osler and

Kelly gave receptions, and there was also a "smoker" in the Faculty building. That same afternoon all the institutions on the east side of the city were open for inspection.

ASSOCIATION OF AMERICAN PHYSICIANS.

FOURTEENTH ANNUAL SESSION, HELD AT WASHINGTON, D. C., MAY 2, 3 AND 4, 1899.

DR. F. P. HENRY of Philadelphia related "A Case of Mitral Stenosis With Fever (non-malarial) of Relapsing Type." This was a case in which the fever recurred at intervals of about one week. The recurrence was sometimes tertian, sometimes quotidian and sometimes double quotidian. The patient was a dressmaker, and had had typhoid fever three months before admission. She had had rheumatism in childhood, and had severe headache and pain in the head and back. Her menses disappeared for two months. Her temperature was 99.2°. She had a presystolic murmur. Her heart was not enlarged. One day after admission her temperature was normal and later it was below normal and then above again, and it constantly relapsed, and this kept up for several days. She was pregnant. The fever was not malarial. It was evidently from the heart trouble. The character of the blood was that of chlorosis. He thought it was either pernicious anemia or ulcerative endocarditis.

Dr. George Dock of Ann Arbor said that if the fever was caused by some process in the blood, it was interesting, but he had not carried his investigations far enough.

Dr. W. W. Johnston of Washington said it was evident that we must look for a micro-organism as the cause, reasoning from analogy. He showed a chart of a case of recurring fever. The intervals are not regular. It was treated as rheumatism, but treatment seemed to have no effect, and finally the case recovered spontaneously.

Dr. Charles Carcy of Buffalo said there was nothing in the description to exclude rheumatic fever.

Dr. Wm. H. Thomson of New York said that intermission was usually connected

with some malarial origin. He once published a case in which the patient became periodically worse every other day, and he never missed this. About 5 A. M. he had a nervous attack. He first had a rise of temperature. For the past four and a-half years his temperature has been normal. It was difficult to give the cause of this.

Dr. Bond said that this intermission might have been due to trouble in the gastric or intestinal tract. In one case there was vomiting, with dilatation of the stomach. In most of the cases there were no gastric symptoms, eructation or fermentative symptoms. She had a slight indigestion, but she was later absolutely well.

Dr. Henry said, in conclusion, that in answer to Dr. Dock the patient recovered and an autopsy was not possible. He thought that some micro-organism must be the cause of the disease.

Dr. Alfred Stengel of Philadelphia read a paper on "The Immediate and Remote Effects of Athletics Upon the Heart." It is astonishing how easily a systolic murmur is developed in athletes. In 1893 he examined the University of Pennsylvania football team, and he found that three out of nine had a murmur, which disappeared after a rest. Muscular exercise lowers the blood pressure in the peripheral vessels and increases the pressure at the center. The second wind is the recovery of the right ventricle after a dilatation. This does not hurt young, healthy persons. Unfortunate results may follow violent exercise in young and inexperienced persons. The danger in athletics is not very great. The systolic murmur is usually over the pulmonary area. A trained athlete may recover compensation from dilatation in a few days. The bad effects in some persons, and even in athletes, may not follow for years to come. Long-continued indulgence in severe sports causes some cardiac hypertrophy, and this comes from over-distension of the right heart in straining. Supervision is necessary in college athletics. Young men should continue some form of exercise after discontinuance of athletics.

Dr. Jacobi asked if he had used the x-rays.

Dr. Stengel replied that he had not in these cases.

Dr. A. V. Meigs of Philadelphia said that researches like this were likely to be fruitful. Not much is known on this subject. Few men become great athletes. The common view of compensation after hypertrophy is theoretically correct, but it is often untenable.

Dr. C. F. Folsom of Boston said that many cases like these were reported after the civil war. Many cases are found in young men defective at the start or from want of systematic exercise. It is easier to strengthen the muscles of the body than it is to strengthen the muscles of the heart.

Dr. Osler said he wished to emphasize one point, and that was the frequency with which he found a systolic murmur over the pulmonary area in healthy persons. The army and navy medical boards should remember this. He had occasion to examine several cases that had been turned down by these boards and who were well and strong. He had been active in getting such men passed. Such rejections did men great injustice. The question of second wind is interesting. He had written an article in the third volume of "Pepper's System of Medicine" on this subject. The question of second wind is the question of the right ventricle. There is always danger to the man over forty who indulges in over-exercise. Such exercise is risky. Great strains have been brought on the hearts of men who insist on riding and keeping up with men younger or more vigorous.

Dr. James J. Putnam of Boston spoke of a paper which he had written several years ago on the condition of the heart among policemen. Murmurs had been found, which later disappeared. He thought it was because they were nervous. He agreed with what *Dr. Osler* said about wheel-riding and hill-climbing in men over forty.

Dr. Dock said it was important to note the pulmonary circulation. There is often acute emphysema in athletes. Many of these men are not trained to expire. The air must be thoroughly expired to get the second wind. The immediate prognosis is interesting. These men with apex mur-

murs are capable of hard work. He related the case of a man who had been first rejected for military service on account of one of these pulmonary murmurs. *Dr. Dock* examined him and passed him, and he outdid his colleagues in hard work.

Dr. Stengel said he did not mean to say that athletics at college were dangerous; as a matter of fact, he has not seen many cases with serious symptoms among college students. He did wish to emphasize the point that college athletics should be under careful medical supervision.

Dr. A. R. Cushny of Ann Arbor then read a paper entitled "The Interpretation of Pulse Tracings," in which he showed pulse tracings and sphygmograms and showed how stimuli to the left or right ventricle affected the rhythm of the pulse beats.

Dr. Dock showed a specimen of a heart in connection with *Dr. Cushny's* case. It was dilated and hypertrophied. The patient had been treated, but did not improve. There were also lung symptoms and anasarca and edema of the legs, and an almost negative response to treatment by rest or medicine. He had always been very anemic, so he was not bled. Such specimens as this, with their sphygmographic tracings, throw some light on these conditions of the heart.

Dr. Jacobi said he had noticed in some cases that the intermission was not complete at all. Auricular and ventricular diseases were not affected equally.

Dr. Cushny said that in about one-half the cases he examined the auricles were affected and in one-half the ventricles.

Drs. J. J. Putnam and J. Collins Warren of Boston read a paper on "The Operative Treatment of Spinal Tumors." This subject has been gone over by many investigators, and especially by *Schlesinger* of Vienna. The first case was one of intradural fibroma, with pain in the back and legs, and later the patient could not use his left limb without great pain. Gas in the bowels caused great distress, and the pain was usually at night after the last meal. A tumor was diagnosed, but he would not consent to an operation. The patient could not stand alone and lost control of the bladder. An operation was performed and the spines from the four

lower lumbar vertebrae were removed, and the lamina of the fourth lumbar vertebra was removed, and the tumor was reached and removed with little hemorrhage and easily. He is now slowly gaining and has every movement possible and appears rather strong. His knee jerk, which was fairly exaggerated, is now normal. He reported other cases, and said that twenty cases had so far been operated on. When to and when not to operate is a question which must be decided by general symptoms.

CLINICAL SOCIETY OF MARYLAND.

MEETING HELD FRIDAY, APRIL 21, 1899.

THE meeting was called to order by the president, Dr. Lord.

Dr. T. C. Gilchrist exhibited several cases, one of lupus erythematosus, and several showing a peculiar affection of the lips and mucous membranes of the mouth.

Dr. J. M. T. Finney read a paper on "The Surgical Treatment of Perforating Typhoid Ulcers," in which he reviewed the work done up to the present time, including the study of 112 cases, and calling especial attention to some of the points in which progress has been made.

Dr. Finney, in referring to the importance of operation, said that in this, as in many other cases, early operation is the main point, and that if these cases of perforating typhoid ulcers could be seen early we should have a much larger percentage of cures. So far as the technique of the operation is concerned he believes there is not much to be gained, as the point has been reached in dealing with these cases where there is not much to hope for in that direction, but we must turn in the direction of an earlier diagnosis for any marked improvement in our statistics. He would, therefore, advise that in any case where the diagnosis is obscure and there is reason to suspect the existence of a perforation a small incision be made, under cocaine anesthesia, in the middle line or linea semi-lunaris, and that cover slips and cultures be taken from the abdominal cavity. Of course, in most instances, the presence of a perforative peritonitis can be determined at once by the naked eye by the

presence or absence of peritoneal exudate. This exploratory incision would be followed by very little disturbance to the patient and very slight risk. If the presence of a septic peritonitis is determined this incision can be enlarged and the operation for the relief of the perforation and peritonitis can at once be carried out. It is quite apparent that there has been, as yet, no pathognomonic sign of perforation described, and until we are able to diagnose perforation early, and with a far greater degree of certainty than at present, it is best to err upon the side of early operation rather than too late, for the dangers of the exploratory incision just described are infinitesimal when compared with the danger attending the development of a general septic peritonitis. It is a satisfaction to know that if, in the effort to forestall the development of this condition, we operate before the perforation has actually taken place, as has been done in several instances, no harm is likely to come of it, as the cases in which such operations have been performed have invariably recovered.

Dr. Osler said he thought it nothing less than remarkable—indeed, it is more than remarkable, it is phenomenal—when one considers the utterly hopeless condition in which one regards a case of perforating typhoid fever; yet surgeons now tell us that 20 per cent. of those cases considered absolutely hopeless have been saved by timely operation. He said he thought the most important lesson to be drawn is that the physicians should travel a little more closely with the surgeons, and that every physician should read certain surgical journals in order to keep in touch with surgical points as freely as he is kept in touch with medical points.

In referring to hospital work, he considers it very important that the house surgeon and the house physician should be in very intimate association. They should see each other's cases, and in the months of August, September, October and November the house surgeon should make visits with the house physician in the typhoid wards.

Dr. E. J. Bernstein read a paper on "Simulated Blindness and Its Detection" (to appear later).

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE.

MEETING HELD TUESDAY, APRIL 11, 1899.

By request of the president the meeting was called to order by Dr. John Neff.

Dr. J. Whitridge Williams: "The Frequency of Contracted Pelves in the First One Thousand Cases Delivered in the Obstetrical Department of the Johns Hopkins Hospital."

Dr. Williams reported upon the examinations by pelvimetry in the first 1000 cases seen in the Johns Hopkins Hospital. He found contracted pelves in 131 cases, or 13.1 per cent. These statistics differ widely from those published by other writers in this country; for instance, Reynolds of Boston, who found only 1.3 per cent. of contracted pelves, but he only examined the cases that required operation, while Dr. Williams measured every obstetrical case. Of the 1000 cases examined, 530 were of the white race and 407 colored, and in the white race there were contracted pelves in 7.14 per cent. of all cases examined, while among the colored race the percentage ran as high as 19.8 per cent. The percentage among the whites is about the same as that shown by other observers in this country, and contracted pelves among the white women in this country are found about as frequently as among the whites in France and Germany. They are somewhat more frequent than in Vienna. So far as Dr. Williams could make out from a study of the statistics his cases presented the best results that have been attained, both as regards the mother and the child, he having lost only three-fourths of 1 per cent. of the mothers and little more than 1 per cent. of the children.

Dr. Williams urged the importance of making pelvimetric measurements in every case, because it is the only accurate method at hand for determining the probable necessity for operative measures.

Dr. G. W. Dobbin: "The Treatment of Contracted Pelves in the Above-mentioned Series."

Dr. Dobbin stated that 4.6 per cent. of all their cases had required operation on

account of contracted pelves, or, in other words, forty-six of the 131 cases of contracted pelves required operation, while sixty-five of these cases were delivered spontaneously. Of the 131 cases of contracted pelves, seventy-nine showed general contraction, twenty-five were of the rachitic type, twenty simple flat pelves and seven of irregular forms.

The operations performed were forceps applications, version, symphysiotomy and Cesarean section. In the forceps operations the blades of the instrument were applied as nicely as possible to the sides of the head. Three craniotomies and one decapitation were performed. In the forty-six cases operated upon there were three maternal deaths, but one of these cases was infected with the gas bacillus before operation, and another had a rupture of the uterus while under care of the midwife and refused to enter the hospital for treatment, so only one case can rightly be attributed to the operative procedure. This case was one of symphysiotomy, which in some inexplicable manner became infected. Fourteen children were delivered dead, but only seven of these deaths could be attributed to the operation, two to forceps operation, four to inability to extract after-version, and one from inability to extract by the breech.

He thought that if version were the operation decided upon it should be done as the primary operation, and not after several attempts and failures with forceps. Dr. Dobbin also urged the advisability of making pelvimetric measurements in every obstetrical case.

As to the choice between forceps and version in cases of contracted pelves, he believed the former operation the most desirable in the majority of instances, and as for the choice between symphysiotomy and Cesarean section he prefers the latter.

THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY.

MEETING HELD MONDAY, APRIL 10, 1899.

DR. H. O. REIK read a paper entitled "The Radical Treatment of Chronic Suppurative Otitis Media" (see page 285).

Dr. Hurd said the communication of Dr. Reik's seemed to him one of great

value. The patient was certainly a most unfortunate boy, who had been a source of loathing and disgust all his life, and who was now placed in a condition to enter a deaf and dumb institution, where he could be taught as much as such children were usually taught, and thus be partially or entirely self-supporting.

Dr. Hall asked if, since all cases of pus in the ear do not require operation, there is any method of bacteriological diagnosis by which one might determine when to operate and when not to operate, as he had understood from a certain professor in Berlin that the presence of streptococcus always demanded opening of the mastoid.

Dr. Reik said he thought it was hardly possible, by bacteriological examination, to determine which cases should and should not be operated upon. He believed that in all cases that resist conservative measures, after a reasonable length of time, should be treated by surgical methods. Of course, the streptococcus infections are more destructive and more dangerous than the staphylococcus, but either may require operation.

Dr. Cary Gamble, Jr., read a paper entitled "Malarial Nephritis," which was followed by a paper by Dr. C. W. Larned upon the same subject, both papers being discussed by Dr. Thayer.

Dr. G. Brown Miller read a paper on "The Occurrence of Streptococcus Pyogenes in Gynecological Diseases."

THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY.

MEETING HELD MONDAY, APRIL 24, 1899.

DR. GILCHRIST: "Exhibition of Skin Cases."

Case 1. *Lupus Erythematosus*.—The lesions here were very typical and showed the well-defined patch, of butterfly shape, with well-marked edges, the patch itself being thickened, indurated and marked by scar tissue. On removing the scales small pedicles are seen, which dip down to the sebaceous glands. There were practically no subjective symptoms. The disease is said to be rather rare and its etiology is still under discussion. It was at one time thought to be connected in some way with tuberculosis, but fur-

ther investigation seemed to show that that was a mistake. More recently, however, it has been shown to react to the tuberculin test, but that is not distinctive, as other diseases of the skin which are not tuberculous may also show this reaction. It is not proven that it is of a tuberculous nature simply because it happens to occur in association with tuberculosis. The prognosis is more favorable in the acute than in the chronic forms. In the acute stages, mild remedies, such as zinc oxide, may be used, and in the chronic cases applications of carbolic or pyrogallac acid have been found useful.

Case 2. *Molluscum Contagiosum*.—Dr. Gilchrist said that so far as he knew there had been no case of this disease reported as occurring in the colored race, but this is the third case seen at the Johns Hopkins Hospital. The patches appear as raised, rounded, well-defined patches, and in the center of the papule can be seen a small depression, in which is a plug of a horny nature. The usual situation is on the face, hands and forearms, but one of his cases had been marked all over the body. The treatment is curetting of the patches and the application of nitrate of silver. The disease is both autoinoculable and contagious.

Case 3. *Squamous Epithelioma*.—The growth in this case appeared on the left hand, between the thumb and index finger; was of twelve months' duration, but the glands were not enlarged. Total excision was the treatment recommended.

Case 4. *Rodent Ulcer*.—This is a somewhat rare affection of the skin. On the left side of the forehead a small scaly patch was first noticed eight years ago, when about the size of a pea. The appearance of this growth was rather peculiar, and diagnosis was only made after the excision of a small portion and microscopic examination.

Case 5. *A Peculiar Affection of the Lips and Mucous Membrane of the Mouth*. This consists in pale-yellowish bodies buried beneath the epidermis. The patient has had the affection for twenty years. At times the breath becomes rather fetid, and he usually finds the affection very troublesome during the spring months. The condition may be compared to a seborrhea of the mucous

membrane. When it first begins it looks like an eczema. The condition was first described by Fordyce of New York, but Montgomery of San Francisco later described its true nature when he discovered it to be an affection of the sebaceous glands.

Dr. Gwyn read a paper on "The Presence of Typhoid Bacilli in the Urine."

Dr. Hunner reported "A Case of Acute Suppurative Cholecystitis, with Isolation of a Pure Culture of Typhoid Bacilli."

Medical Progress.

FUNCTIONAL NEUROSES.—*Dr. H. J. Boldt*, professor of gynecology in the Post-Graduate Medical School, New York (New York Medical Journal), makes some valuable and extended observations on the neuroses and their relation to the diseases peculiar to women. "All psychoses with serious symptoms," says *Dr. Boldt*, "should be under the direction of the neurologist. On the other hand, however, the greater number of functional neuroses can and should be treated by the intelligent family physician if he is familiar with those conditions to which, according to the remarks on this occasion, they are supposed to be due. It is a serious error to give a long course of local gynecological treatment to neurotic patients with a minor local lesion. They will invariably become worse if attention is not paid to general hygiene, diet, proper physical exercise, and such internal remedies as will have a tendency to build up the system. To overcome the anemia so often associated in this class of cases, I have found the solution of bromide of gold and arsenic to be among the most servicable drugs at our disposal, beginning with five-drop doses in a glass of water after meals and increasing one drop daily until from fifteen to twenty drops are taken. The red blood corpuscles and the percentage of hemoglobin are rapidly increased with the use of this drug. Occasionally, however, we do find a patient with whom it disagrees, when we must resort to other remedies. The gold solution has also a decided effect on the inflammatory conditions of ovaries. This

was pointed out by an author in a European journal ten or twelve years ago, and has been employed during that period by me. Since the introduction of *Dr. Barclay's* solution, which is a combination with arsenic, it has been used with better effect than the chloride of gold and sodium in pill form. A symptom usually present in these patients is chronic constipation; this often gives rise to anemia and chlorosis, due to auto-intoxication from ptomaines. I regard the cause of this constipation in the vast majority of cases as due to habit, and if one confines himself to the legion of laxatives and cathartics the condition is made worse."

* * *

INDICATIONS FOR DIGITALIS.—*M. Potani* calls attention in the American Journal of the Medical Sciences to the vasomotor action of the drug, which is often overlooked; that with a rather generous dose, migraine, due to cerebral congestion, can be overcome, where a small dose, acting on the circulatory center, would simply aggravate the condition. Diuresis is produced only in those cases in which there is anasarca, and is due to the anasarca; often there is diuresis without increase of blood pressure. When the dropsy has disappeared the diuresis ceases. Diminution of the dose is indicated on disappearance of dropsy, for digitalis is then longer well borne. Its cumulative action is mentioned; the chief indications are increased frequency and irregularity of the pulse and the presence of edema. In cases the reverse of these it is useless or harmful. Special warning is given against its careless use in myocarditis with fatty degeneration and in cardiac asthenia with dilatation. In cardiac dilatation of gastric origin digitalis is harmful, for it is not tolerated by the stomach. Arterio-sclerosis is not a contraindication if caution is used. Where increased frequency of the pulse or dropsy is present in aortic insufficiency digitalis is distinctly indicated. Usually these conditions do not exist. The same is true in mitral stenosis. In mitral insufficiency it has its widest use; wait before commencing, because it is late in the disease that digitalis is most needed. When tricuspid accompanies mitral insuffi-

ciency the former, unless great care be taken, is made to disappear too rapidly by digitalis, and pulmonary apoplexy results, through increase of capillary pressure. Of the preparations the powder is too often emetic and unreliable. Digitalin is preferable.

* * *

CONSULTANT'S FEE.—In case of consultation, says Mr. Arthur N. Taylor in the *New York Medical Journal*, the custom seems so well established that the patient will pay the fee of the consultant that an agreement between the patient and attending physician that the physician will pay the consultant's fee does not release the patient from paying such fees unless the consultant is informed of such arrangement before the services are rendered. Where, however, an attending physician takes another physician to a patient's house to convince the patient that he is doing all that can be done, and the physician so called in does nothing whatever for the patient, and is not, in fact, called in at the patient's instance or request, the patient is under no obligation to pay him anything. Nor does it necessarily follow where a patient employs two physicians, who, in fact, meet at his bedside at each call, that each meeting will rank as a consultation. In the matter of Succession of Duclos, the court said: "As to the pretension that, from the moment more than one physician is called in, and attends regularly upon a case, every visit made by every physician employed takes rank as a consultation, it cannot be listened to, even supposing that the visits are made at the same hour, so that the physicians actually meet at the patient's bedside. The difference of the charge for what is technically styled a consultation and for a simple visit would make it ruinous to most patients and unreasonably onerous to all to avail themselves of the lights of more than one of the faculty in time of need."

* * *

TREATMENT OF ABORTION.—Drejer (*British Medical Journal*) discusses the treatment of abortion in connection with 100 cases which he met with in his private practice between the years 1893 and 1897. When abortion is imminent rest both ma-

terial and moral is recommended; in this way the miscarriage may be avoided. Five or six days in bed is the length of time usually considered sufficient, for if the hemorrhage has not stopped in that time it will be very difficult to prevent the abortion, and if it have ceased the pregnancy will now continue uninterruptedly. He thinks little of internal remedies, save perhaps opium, which aids cure by procuring rest. He does not believe in the vaginal plug, regarding it as usually quite useless. If the removal of the ovum is indicated by circumstances it is best carried out by means of the fingers or of instruments. The manual method is always preferable. It may be done by expression, and this fatigues the patient very little. This is indicated when the os has a diameter of about four cm., and when the ovum is in great part detached and in the cervical canal. In fifteen cases this plan was followed, and in twelve the ovum was thus delivered, but in three only pieces came away, and the rest had to be removed by the finger. If expression fail, two fingers are to be introduced into the uterus and the ovum, or parts of it, at once taken away. In abortion, just as in labor, everything should be removed at once. The finger is generally to be preferred to the curette. Drejer is strongly opposed to the use of all kinds of ovum forceps. The results of treatment were that ninety-nine women recovered fully; one patient, in whom curettage took place after six weeks of blood loss, died from weakness twenty days later, but without the development of fever.

* * *

CONSTIPATION FROM OATMEAL.—It is very common for physicians to order oatmeal and such coarse food to those suffering from constipation with the idea that the indigestible portions of the meal will cause a certain amount of irritation and keep the bowels open. This is usually the case in those who have much outdoor occupation and work, but Dr. George J. Monroe points out in the *Cincinnati Lancet-Clinic* that in the aged and indolent oatmeal produces constipation of a most serious character, and he most strongly advises against it in those past sixty.

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BALTIMORE, MAY 13, 1899.

THE annual recrudescence of sexual passions in the negro as demonstrated by the recent horrible assaults on

The Negro and His Sexual Passions. white women seems to increase in force and frequency as the African

sexualist is more and more allowed the liberty of his sway of ancestral animal impulse, and as moralists continue to remain purblind to his dominant physiological organism—a dominant organism which is demonstrated by periods of sexual excitement which operate under a license of passion seen only in the wild beast. In fact, when in captivity the wild beast becomes sexually impassioned, he is either killed or sent away where he can be controlled.

It is not the function of this JOURNAL to enter into the sociological or the anthropological questions governing the crime of indecent assaults on defenseless white women. The attitudes of complacent moralists, the preachings of far-distant ascetics, and the advice of maidenly moralists, whose nubile age is uncertain in the chilly atmosphere of New England, would be amusing were it not for the serious conditions underlying the misunderstood facts.

The anatomical and physiological conditions of the African must be understood, his place in the anthropological scale realized, and his biological basis accepted as being unchangeable

by man, before we shall be able to govern his natural uncontrollable sexual passions. When education and religious teachings change the biological basis of his color it will also be able to change the physiological reason for his annual outbreak of sexual madness. Like all animal nature throughout the world, the African is especially sensitive to the changing seasons. The regular increase of crime against property in winter is only an indirect result, through the social and economic influences of temperature, but the increase of crimes of passion and indecent assaults during the month and years when the temperature commences to rise is the direct effect of temperature. The crime of rape is most numerous in May and June, and least so in November and December. Ignore the inherent and peculiar sexual organization of the African and crimes against the trembling white women of the South will increase. Accept boldly, frankly and scientifically his ancestral traits, and control him accordingly, is the only rational, safe and moral treatment of the negro question.

* * *

At this time of the year the medical society holds its meeting, and over all the land the State and national organizations are convening to exchange ideas and help each member. There is undoubtedly much benefit gained from this interchange of opinions and intermingling of men interested in the same work; but it sometimes seems as if the ideas presented were very few in proportion to the many words uttered. For instance, at one meeting papers were read lasting one-half to three-quarters of an hour and in some cases an hour.

With the exception of annual addresses and special orations such great length detracts rather than adds to the value of a paper, and by the time the weary listener has separated the few grains of wheat from the chaff he is worn out. If long papers are necessary, let them be indicated rather than read; let an abstract be presented or a preliminary announcement of the work be made verbally and the subject as a whole be presented in some proper medium where it may be read by those wishing to do this.

If the relation of a number of cases much alike, and often put down for effect, be omitted the saving would be appreciated. Long-winded writers and long-winded speakers are very wearing and they should not be encouraged.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending May 6, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	2	..
Pneumonia .....	..	21
Phthisis Pulmonalis.....	1	17
Measles	14	..
Whooping Cough.....	1	..
Pseudo-Membranous Croup and Diphtheria. }	16	..
Mumps .....	..	..
Scarlet Fever.....	13	1
Varioloid .....	..	..
Varicella .....	..	..
Typhoid Fever.....	3	1
La Grippe.....	..	2

Dr. Hugh Ewing of Abingdon, Va., is dead.

Dr. S. J. Ulman has been appointed a police surgeon.

Smallpox is said to be very prevalent in some parts of Germany.

The governor of Maryland has appointed Dr. T. S. Latimer on the State Lunacy Board.

Dr. Benjamin Munday, late of the Medical Department, U. S. A., died at Richmond recently.

Surgeon J. C. Boyd, U. S. N., is to represent the navy at the International Medical Congress.

The Maryland Public Health Association held its third annual session in Baltimore during the past week.

Dr. Henry C. Robinson, formerly of Martinsburg, W. Va., died Tuesday last at his home in Grand Crossing, in Illinois.

A thoroughly equipped and valuable cabinet office battery may be bought at a great sacrifice by applying to the office of this JOURNAL.

Among the newly-elected members of the city council of Baltimore are Drs. James G. Linthicum, Thomas Sudler and J. D. Norris.

Dr. John R. Winslow, who limits his practice to diseases of the nose, throat and chest, has opened an office at 317 North Charles street.

Dr. C. W. Mitchell has removed to 211 West Madison street, between Park avenue and Howard street. Telephone 196; office hours, 2 to 4 P. M.

Dr. Milton A. Lauver of Carroll county died suddenly last week. He was fifty-seven years old and was graduated from the University of Maryland in 1865.

Dr. Wm. Russell of the class of 1826, and the oldest Harvard graduate, died last week, aged ninety-nine. He was a practicing physician and had never worn an overcoat.

Dr. W. W. Godding, superintendent of the Government Hospital for the Insane, near Washington, died last week, aged sixty-eight. He had been connected with the institution since 1877.

At Chestertown, Md., Dr. W. Frank Hines has been appointed county health officer of Kent; Dr. Harry L. Dodd, physician to the county jail, and Dr. C. W. Whaland, physician to the county almshouse.

The programme of the twenty-fifth annual meeting of the Maryland State Homeopathic Medical Society is most extensive. The meeting will take place May 16 and 17, and three sessions will be held each day.

Dr. David Streett has been re-elected dean of the Baltimore Medical College, and Dr. Duncan MacCalmun is assistant dean and superintendent of the Maryland General Hospital.

In the seventeenth annual report of the Baltimore Eye, Ear and Throat Charity Hospital the number of patients treated during the past year was 3702, and 11,219 were treated in the dispensary, with 467 surgical operations.

The Board of Medical Examiners of Maryland will meet in Hazazer's Hall, Franklin street, Baltimore, May 18, 19 and 20. Full information may be obtained from Dr. J. McP. Scott, Hagerstown, Md.

The late Mr. Benjamin F. Horwitz of Baltimore has left \$5000, with directions that the legacy be invested and the annual income used to purchase a medal to be bestowed by the medical faculty of the Johns Hopkins University upon such member of the medical profession either in this country or abroad who has accomplished the most during the preceding year in ameliorating the sufferings of mankind in the way of medical discoveries. This bequest is left in honor of the memory of his own son, Dr. Eugene F. Horwitz, and is to be called the "Dr. Eugene Horwitz Medal."

Washington Notes.

The name of the "Eastern Dispensary and Emergency Hospital" has been changed to "Eastern Dispensary and Casualty Hospital."

No new cases of smallpox have been discovered for several days. The number of cases in the hospital has been reduced to twenty-one. No deaths from cerebro-spinal meningitis have been reported for three days.

Dr. John E. Carpenter died at his residence, No. 44 R street, Wednesday, May 3. Dr. Carpenter was a native of Ohio; was assistant surgeon in the Union army during the civil war; for the last twenty years he had held a position in the Pension Office.

The Prince George's county physicians have organized a medical association with the following officers: Dr. Charles A. Wells of Hyattsville, president; Dr. M. D. Hume, vice-president; Dr. French Owens of Marlboro, secretary, and Dr. L. A. Griffith, treasurer.

The Gastro-Enterological Association ended its annual meeting in this city last week. The officers for 1900 are as follows: President, Dr. Max Einhorn; vice-presidents, Drs. John C. Hemmeter and W. D. Booker; secretary and treasurer, Dr. Charles D. Aaron.

Medical Society of the District, Wednesday evening—Dr. Roy, "The Bronchitis and Pleuritis of Uric Acid;" Dr. Lamb, specimens, Meckel's diverticulum compound pneumonia, omental tumor, multiple abdominal tumors, prostatic tumor.

Dr. William Whitney Godding, superintendent for many years of the Government Hospital for the Insane, died Saturday, May 6. The doctor was born at Winchendon, Mass., in 1831; received the degree of bachelor of arts from Dartmouth in 1854, and that of doctor of medicine from Castleton Medical College in 1857. For a time he was engaged in general medicine, then as assistant physician in the New Hampshire State Asylum. In 1863 he became assistant physician of St. Elizabeth, and after seven years became superintendent of the Massachusetts Hospital for Insane. After another seven years, in 1877, he was made executive and medical head of the Government Hospital for the Insane. Dr. Godding's successor will probably be Dr. J. C. Simpson, who has been assistant superintendent for a number of years.

Book Reviews.

PROGRESSIVE MEDICINE. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., etc. Vol. I. March, 1899. Surgery of the Head, Neck and Chest; Diseases of Children; Pathology; Infectious Diseases, including Croupous Pneumonia; Laryngology and Rhinology; Otology. Philadelphia and New York: Lea Bros. & Co. 1899.

This new work is offered by the editor and publishers as a middle way between the "Annals" and "Year-Books" and the regular weekly and monthly journals. The idea is to present a "well-told tale of medical progress in all its lines of thought, told in each line by one well qualified to cull only that matter which is worthy of his attention and necessary to his success." The list of contributors of the series contains among others the names of Drs. Joseph C. Bloodgood, John G. Clark, Robert L. Randolph and William S. Thayer, all of the Johns Hopkins University. The contents of this volume are as follows: "The Surgery of the Head, Neck and Chest," by J. Chalmers Da Costa, M.D.; "The Diseases of Children," by Alexander D. Bloodgood, M.D.; "Pathology," by Ludvig Hektoen, M.D.; "Infectious Diseases, including Pneumonia," by William Sydney Thayer, M.D.; "Laryngology and Rhinology," by A. Logan Turner, M.D. (Edin.), F.S.C.S. Edinburgh, and "Otology," by Robert L. Randolph, M.D.

There are numerous illustrations. The work is a very attractive one.

INTERNATIONAL CLINICS. A Quarterly of Clinical Lectures and Specially Prepared Articles on Treatment and Drugs. By professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by Judson Deland, M.D.; J. Mitchell Bruce, M.D., F.R.C.P., and David W. Finley, M.D., F.R.C.P. Vols. III and IV. Eighth Series. 1898. Octavo, pp. xii-355. Philadelphia: J. B. Lippincott Co. 1898.

These volumes still maintain their high standard and are very helpful to the student and practicing physician. In addition to an article on a special subject, each volume contains a series of lectures on treatment which is of great practical use.

The Use of Nosophen and Antinosine in Purulent Disease of the Middle Ear. By Frederick H. Millener, M.D. Reprint from the *Buffalo Medical Journal*.

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Original Articles.

OXALURIA—ITS CLINICAL SIGNIFICANCE.

By Robert F. Williams, M.A., M.D.,

Professor of Materia Medica and Therapeutics,
Medical College of Virginia, Richmond, Va.

READ BEFORE THE RICHMOND ACADEMY OF MEDICINE AND SURGERY, MARCH 28, 1899.

THE observation in the past year of several cases in which the presence of calcium oxalate crystals in the urine was a marked symptom, and in two of which the diagnosis of serious organic disease had been made, has led me to believe that a few remarks on this subject may be timely. At the outset of this paper I wish it to be understood that I am not asserting any fixed beliefs, for the cases observed have been too few to establish facts, but my remarks are intended as suggestions which will, I hope, lead to discussion by those who have had greater opportunities for studying the subject, which may clear up doubtful points, or, at least, stimulate further study and investigation in this direction.

In studying up the cases referred to I was struck with the paucity of literature on the subject, many of the newest textbooks making no mention of the condition even, and those containing articles on the subject omitting, in the very brief accounts given, several points which strike me as being of great clinical significance, as it was on account of these points that confusion arose in two of my cases. And, furthermore, in the periodical literature at my command I have been able to find but little on the subject.

Oxalates occur in the urine in varying amount from the ingestion of foods which

contain them, such as rhubarb, cabbage, pears, etc. Further, it has been shown that certain bacteria are capable of forming this acid, which occurs in the intestines and is found in the feces in the form of the calcium salt, which may be absorbed. Osler states that the condition is a manifestation of "some disturbance of metabolism," and Thompson attributes it to "incomplete oxidation in the system of starchy, saccharine and fatty foods." Purdy states that the oxalates are excreted in excess "upon an exclusive or excessive diet of flesh and fat, indicating their formation from proteids." Purdy sums up his article with a statement of the conclusion of Beneke that oxaluria has its proximate cause in impeded metamorphosis in that stage of oxidation which changes oxalic acid into carbonic acid; that the chief source of oxalic acid is in the nitrogenous foods; that retardation of their metamorphosis may be caused by such conditions as the following: Excess of nitrogenous food, excess of starches and sugars, conditions diminishing oxidation by interfering with the proper function of respiration and circulation, depressed nervous conditions.

A small amount of calcium oxalate is often found under normal conditions, and large amounts may be present without the coexistence of any of the symptoms characteristic of the condition, which would go to show that the presence of calcium oxalate in the blood is not productive of the so-called symptoms of oxaluria, but is simply one of the symptoms of the primary condition. In those cases in which other symptoms than the appearance of the crystals in the urine are in evidence, in addition to the symptoms of indigestion always present, some forms of functional nervous disorder is usually

found, tremulousness, depression, irritability, neuralgic pains, etc. This "nervousness," which in the minds of many is a result of the irritant action of the salt in circulation, may possibly, I think, stand often in a causative relation. The frequent occurrence of oxalates in melancholia would indicate this, as well as the fact often observed in patients suffering from oxaluria, that after the disappearance of the crystals nervous or mental strain for a few days will often cause their return. Furthermore, the oxalates may be absent in the morning urine, while present in the evening urine, indicating that by nerve rest in sleep and relief from the wear and tear of conscious nervous activity the derangement of metabolism is mitigated.

Returning for a moment to a consideration of the causes of the appearance, we have found derangement of metabolism as a frequent cause. Now as to what part of the organism is chiefly concerned in the conversion of proteids and other foods the physiologists have not decided definitely. Of course, much of this occurs in the muscular structures, but experiments in walking-matches and other feats of muscular effort have not shown an increase in excretion proportionate to the increased muscular activity, from which the conclusion is drawn that the liver has much to do with this process. If this be true, then we can conclude that the universally adopted and efficient treatment by nitrohydrochloric acid causes a disappearance of the oxalates by stimulating the liver to increased functional activity. This, however, as a direct action of nitrohydrochloric acid is nowadays denied by observers. The acid does, however, stimulate the vaso-motor center and heart's action, and in so vascular an organ as the liver such improvement in circulatory conditions must necessarily improve the function. But this betterment is due to nerve stimulation, which would further strengthen belief in depressed nerves as the ultimate cause of the condition, even where the apparent cause is clearly due to derangement of some other organ.

The symptoms usually described are indigestion, more frequently intestinal than gastric; "nervousness" in one or

more of the forms mentioned, often cutaneous changes, such as dryness, psoriasis, etc., and by microscopical examination of the urine of the octahedral or dumb-bell crystals of calcium oxalate in quantity. In none of the text-books do I find any mention of albumen associated save one, "Cullen's Practice," published in 1793, in which he notes the occasional occurrence of albumen, but never of casts. In two of my cases albumen and casts were present, which led to a temporary confusion in the diagnosis of Bright's disease. That the irritant action of calcium oxalate in excretion by the kidneys is sufficient to account for the moderate amount of albumen and hyaline casts must be evident when we consider the severe degree of nephritis caused by certain other drugs. Further symptoms which I have observed, but of which no mention is made in the text-books, are disturbances of circulation, irregular nervous heart action and vaso-motor derangement, anemia, slight or marked, which is readily accounted for in the lack of digestive power and derangement in the metabolism, and usually a decrease in the amount of urine, as will be shown by a statement of the cases.

Case 1. Simple oxaluria.—Dental student, aged about twenty-two; unwell for past three or four months; complains of dyspepsia, a good deal of belching and flatulence, constant dull headache through the temples; very nervous, hands tremble; mental depression is marked, and he often worries; cannot concentrate his mind on his work; some insomnia; pale, often chilly, sweats freely; pulse compressible and irregular, intermitting every five or six beats; some cloudiness before eyes at times; pain in the small of the back pretty constant; urine irregular in quantity, often scant, oxalates in abundance in night urine, very little in morning; no albumen, no casts.

Case 2. Mrs. X., past middle life, nervous temperament; history of nervous prostration in 1895; in December, 1897, she showed the following symptoms: Severe indigestion, eructations, heartburn, nausea frequent, tendency to diarrhea, occasional attacks of "weakness;" nervousness very great, could not keep still; insomnia distressing; palpitation of the

heart; neuralgic pains in heart and legs; headache frequent; pain in the back; some swelling of the feet at times, which did not pit on pressure; urine diminished in quantity, analysis showing reaction acid; specific gravity 1.020, trace of albumen, no sugar. Microscopic: Epithelium, occasional leucocyte and very occasional hyaline cast. Another examination at this time showed a similar condition, except that oxalates were present in quantity.

Case 3. Mrs. A., past middle life; great nervous strain in the fall of 1897. Her condition that fall as reported to me when I first saw the case in the spring of 1898 was that she had nervous prostration and Bright's disease, with heart complications, the urine showing albumen, casts and oxalates and scanty in amount. She spent most of the winter in the far South, and in January an analysis still showed oxalates. When I saw her she presented the following symptoms: Marked indigestion, both gastric and intestinal; eructation, flatulence, constipation, occasional nausea and vomiting; nervousness, mental depression, and an inclination to worry over trifles and imaginary troubles; insomnia, great susceptibility to mental and physical fatigue; marked degree of anemia; blowing systolic murmur heard at the apex, no enlargement of the heart, palpitation frequent; urine was about normal in amount and showed the following analysis: Reaction acid, specific gravity 1.018, no albumen, no sugar. Microscopic: No casts, a few leucocytes, crystals of uric acid and calcium oxalates.

Case 1 is cited to show the similarity of certain of the general symptoms present to some of the symptoms of Bright's disease, although the analysis does not suggest it. Cases 2 and 3 are more striking, in that the urinary symptoms were so suggestive as well as the general symptoms. In neither form of chronic Bright's disease do we have a constant clinical picture, the symptoms varying in different cases, but symptoms of frequent occurrence, such as pain in the back, headache, nervousness, indigestion, anemia, etc., were all present in these two cases, which, taken with the urinary symptoms described, presented a picture so closely agreeing with the description of Bright's disease that the diagnosis seemed posi-

tive. In both of these cases named the condition was preceded by marked nervous derangement.

So much for the symptoms. Let us follow the cases under treatment.

Case 1 was diagnosticated "oxaluria" for lack of a better name, and prompt recovery promised. The patient was put on three-drop doses of the strong nitrohydrochloric acid three times daily and his diet regulated, exercise and cold baths in the morning prescribed. After four days' treatment he reported himself as much improved, appetite good, bowels regular, headache very slight at times, slightly nervous occasionally, but never enough to interfere with his work, sleeping well. This prompt amelioration of the nervous symptoms will naturally suggest that they were produced by the oxalates, but all the nervous symptoms described may be produced by vaso-motor irregularity, as I have seen in other conditions, and their disappearance may have been caused by the stimulating action of the acid on this part of the organism.

Case 2 was at first diagnosticated Bright's disease, but was put on no special medicinal treatment—only dietetic and hygienic—except that the strong freshly-prepared nitrohydrochloric acid was prescribed for the oxaluria present. On account of personal relations this case was watched with more than usual interest and solicitude, and in a few weeks I had the satisfaction of noting marked improvement in all the symptoms except the nervousness, which, though abated, still continued to some extent with occasional annoying exacerbations. The urine was watched and frequent examinations made. Water had been freely prescribed, and the quantity of urine had never again fallen below normal, while the chemical analysis and microscopical examinations have failed to show again any sign of albumen or casts. In the latter part of January, after some annoyance and worry, with increased nervousness, an analysis showed a few leucocytes and numerous crystals of calcium oxalate in strongly acid urine; otherwise the urine was normal. The previous treatment in a few days gave relief from the annoying symptoms.

Case 3 was given a favorable prognosis, being told that all of her alarming symptoms arose from nervous debility and indigestion, and that her heart trouble was due to the impoverished condition of her blood. She was put at once on strong nitrohydrochloric acid, with manganese and iron, a diet of easily-digestible food, cold morning baths and massage. In a month the urinary analysis showed reaction acid; specific gravity 1.019, no albumen, no sugar. Microscopic: Very little squamous epithelium and an occasional urate crystal. The acid was then stopped and treatment continued practically as before, with the addition of nuxvomica and bitter tonics. In two months she had gained flesh, the heart murmur had disappeared, appetite and digestion improved, her strength increased, and she was able to sleep well. The nervousness continued till towards midsummer, when she ceased to complain of it. The urine had been examined at intervals since, but has failed to show any return of the alarming symptoms. She now does what she pleases, and says she feels better than she has in many years; in fact, well.

In these two cases we see, then, a clinical manifestation of Bright's disease, accompanied by the presence of oxalates, but in each case the removal of the oxalates caused a disappearance of the nephritic symptoms, so that the diagnosis of Bright's disease had to be abandoned. Both gave a history of previous nervous depression, and in both the nervous symptoms continued a considerable time after the disappearance of the oxalates.

In Case 1, in which the condition was of short duration before consultation, we find no albumen nor casts associated with the oxalates, but constitutional symptoms simulating Bright's disease.

Now a word as to the production of albumen by oxalates, and in this connection I regret to say that I can find so little about the chemical and physiological questions involved that I have only theories to offer, but theories which seem to me to explain the condition and which may not be untenable. Just what becomes of oxalic acid from the time of its formation in the tissues or liver until it appears as calcium oxalate in the kidney and urine

is a point that the writers on this subject whom I have read pass over with calm indifference, and just on this point rests a satisfactory explanation of the claim that the oxalates caused the urinary symptoms of Bright's disease in the cases reported.

We have found as sources of the oxalates two causes other than derangement of metabolism, viz., the ingestion of calcium oxalate in the food and its production by certain bacteria in the intestines. In both cases, in other words, the calcium oxalate is present in the intestine, from which it is absorbed. Now as calcium oxalate is insoluble in an alkaline solution, it must exist in the intestine in the form of crystals, which opinion seems verified by the fact that the crystals are found in the feces. Hence they must be absorbed as crystals, and, since the blood is an alkaline, watery medium, and calcium oxalate is insoluble in water or alkaline solutions, they must be absorbed from the intestine as crystals and circulate in the blood as such, and must, therefore, be excreted by the kidney as crystals, which would readily explain the production of albumen and casts by the mechanical irritation of the renal cells. Though this theory is not in accordance with generally accepted teaching in regard to the excretion of urinary solids, it seems to me not impossible, as the minute crystals of calcium oxalate of different sizes which we see in the urine may all be formed in the urinary tract by the aggregation of even more minute crystals, which could pass through the kidney structure as the leucocytes do or even accompanying the leucocytes, and in passing through the kidney produce irritation mechanically. On the other hand, considering the oxalic acid as formed in the tissues and liver, it is possible that it may combine with sodium, for instance, forming a soluble salt, and so exists in solution in the blood and forms the insoluble calcium salt after excretion by the kidney. But sodium oxalate is not an irritant, and so could not produce albumen and casts in excretion. But since we have found albumen and casts associated with oxalates, which disappeared with the oxalates, it is fair to conclude that the oxalates produce the albumen by irritation,

and I can see no other conclusion than that the oxalates—when productive of albumen—exist in the blood as minute crystals and produce their irritant effects mechanically.

The question naturally arises, why have not the crystals been observed in microscopical examinations of the blood? My idea is that they are so minute as to escape observation in blood examinations, but form the larger crystals which we find in the urine by aggregation in the uriniferous tubules or lower down in the urinary tract.

From a consideration of these cases, then, I make the following deductions:

1. Whereas the appearance of oxalates in the urine—excluding their ingestion in foods—is due to a derangement of digestion or metabolism, this derangement probably has its cause in many cases in functional nervous irregularity, which may or may not be so great as to produce general nervous symptoms, and if these be present they are not necessarily caused by the oxalates.

2. The condition causing the appearance of oxalates in the urine may produce symptoms closely simulating the constitutional symptoms of Bright's disease.

3. The excretion of oxalates by the kidney for a short while may occasion no local disturbance of that organ, but if continued may, by irritation, cause the appearance of albumen and casts with lessened urine, corresponding to the urinary symptoms of Bright's disease, and if unchecked may lead to permanent destruction of kidney tissue and true Bright's disease.

4. In all suspicious cases in which the nephritic symptoms are accompanied by the appearance of oxalates in quantity diagnosis should be held in abeyance and the oxaluria overcome by appropriate remedies to exclude this as a possible cause of the symptoms before making a positive diagnosis and pronouncing a necessarily hope-dispelling prognosis.

SWEATING FEET.—For sweating feet Gerdech recommends in the *Therapeutic Gazette* painting the soles with formalin. About twenty drops are used for each application and a few drops are poured into the shoe.

ERYTHEMA SCARLATINOIDES—A CASE.

By J. Travis Taylor, M.D.,

Lecturer on Diseases of the Skin and Hygiene, University College of Medicine, Richmond, Va.

READ BEFORE THE RICHMOND ACADEMY OF MEDICINE AND SURGERY, APRIL 11, 1899.

ERYTHEMA scarlatinoides may be defined as a non-contagious eruption, closely resembling scarlatina in its cutaneous manifestations, but differing much from this disease in its further course. Upon this resemblance and the consequent frequent necessity for a differential diagnosis rests the importance of an acquaintance with the salient points in the disease.

The attack comes on suddenly, possibly preceded for a day or two by malaise and a slight febrile disturbance, with a decided chill and a temperature ranging from 100°-103° F. The eruption occurring coincidently with the elevation of temperature may manifest itself on any portion of the cutaneous surface, though some part of the trunk seems to be the part preferred, and rapidly spreads over the whole body. It is in most cases uniform and of an intense scarlatinal redness, though it may be punctate or with some pin-head vesicles. In a large number of cases there are sharply-defined patches of the eruption, particularly on the face, and the contrast of these patches and the white, healthy skin makes a striking picture. There is redness of the mucous membrane of the mouth and throat, the tongue is foul and, according to Morris, has infrequently a more or less distinct strawberry character. Sometimes there is a considerable amount of burning and itching of the skin.

The fever exists only a short while, usually one or two days, when the desquamation begins almost invariably on that portion of the body at which the eruption first appeared. This may vary from the furfuraceous variety in the face and scalp to large flakes on the body and extremities, there being sometimes marked casts of the fingers, toes, palms and soles. The hair and nails are infrequently shed.

Brocq is quoted by Crocker as describ-

ing another and much more prolonged type of this disease, lasting from three to six weeks, accompanied by a more diffuse eruption, more marked throat symptoms and a greater tendency to recurrence.

The process of desquamation lasts from one to five days, although a second attack may immediately supervene on the first. This tendency to recur is always present in a greater or lesser degree, there sometimes being a seeming predilection for a return in certain seasons of the year, as spring or autumn, but each attack is milder than the preceding ones.

The etiology of this disease is by no means clear, but some peculiar idiosyncrasy on the part of the patient seems a leading factor. It may occur in the course of acute rheumatism, pneumonia, malarial fever, enteric fever, syphilis, septic infection or anemia, but in all these cases it is an open question as to whether the eruption is due to the concurrent infection or to some drug administered for the cure of that infection.

It has been seen after the injection of tuberculin in gonorrhea, where no copaiba had been used, and Lépine reports the eruption in a patient with an artificial anus, the latter case being attributed to poisoning by the absorption of ptomaines.

Crocker and Jackson both give poisoning by sewer-gas as another causative agent.

Certain drugs, notably quinine, belladonna, mercury, salicylic acid, copaiba and opium, may cause this trouble. Crocker says: "In these latter cases the rash is due to irritation of the alimentary canal acting reflexly on the vaso-motor centers."

As stated above, the importance of this eruption depends mainly on the difficulty of a diagnosis from true scarlatina. Bear in mind the course of the two troubles, and the mild constitutional disturbance, almost invariable absence of the typical strawberry tongue, lack of a general eruption in many cases, sharply-defined patches of redness in others, desquamation about the fourth day and non-contagious character of the one, in contradistinction with the severe constitutional disturbance, red and swollen fauces, strawberry tongue, general eruption, with desquamation on the tenth day and his-

tory of contagion of the other, should make a diagnosis easy, if not certain.

The treatment is purely symptomatic. It is best to isolate in all cases for a few days to avoid any possible danger arising from the spread of scarlet fever. Clear the alimentary canal with a saline purge. Use simple dusting powders on the skin, and, should there be any inflammation, use some soothing lotion, such as one of calamine earth or some alkaline solution. In every instance try to find the underlying cause and treat that.

Case: W. K., aged fourteen, of this city. He first came under my observation in the fall of 1897, when he was suffering with intermittent fever. Quinine was exhibited in two-grain doses every four hours, and after several days fever was checked. He was instructed to continue the medicine three times a day for some days, and left the city to visit friends in the suburbs.

Two days after I was called to see him at his home, and learned that the day before he had a chill, fever and eruption on his body. A physician had been called in, and suggesting that it was most probably scarlatina, advised that he be returned to his home in the city, which had been done.

I found him with a temperature of 102° F., a diffuse eruption over his whole body, extremities and face, a furred tongue, which was reddened on the edges, very slight sore throat, but saying he felt first-rate but for the itching and stinging of the eruption.

A diagnosis of probable scarlatina was made, but the constitutional symptoms were so slight, and the patient being constipated, I simply ordered a dose of calomel, soda and ipecac, to be followed by Epsom salts in the morning. In the meanwhile strict isolation was enjoined.

The next day the fever had disappeared and the only symptom of importance was the eruption. The nurse was instructed to bathe the child with a weak solution of bicarbonate of soda in water, which was done, and the day subsequent, or fourth day of disease, the desquamation began. This was the most marked that I have ever seen. Large flakes were cast from the body and limbs, with almost perfect casts of the soles and the palms.

Then a diagnosis was made of erythema scarlatinoides, probably due to malarial infection.

I next saw this patient in the autumn of 1898, when he had another attack almost entirely similar, though none of the symptoms were so marked. On investigation it was found that quinine had been administered by the child's mother just previous to this attack, and the thought was suggested that this might be the cause of the eruption. It was determined to use the same treatment in this attack as before, and then to experiment with the quinine.

The result of the treatment was excellent, and after an interval of one month quinine was again exhibited in three-grain doses, three times a day. After the use of this remedy for three or four days the eruption again appeared, and followed an exactly similar course as in the former attacks, with the exception that the throat symptoms were wanting and the eruption did not affect the face at all.

Society Reports.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

REGULAR MEETING HELD MARCH 28, 1899.

DR. E. C. LEVY, president, in the chair; Dr. Mark W. Peyser, secretary and reporter.

Dr. R. F. Williams read a paper on "Oxaluria" (see page 317).

Dr. J. S. Wellford said that there was no evidence that the crystals enlarged, but that they might aggregate to form a large mass. He could conceive the formation of calcium oxalate in the intestines by bacteria, but not their absorption by the blood-vessels, with subsequent elimination elsewhere. If the crystals were formed in the alimentary canal they would be excreted by it. The paper contained a number of points explanatory of oxaluria. Any condition of disordered digestion or lowered nerve tone, such as was produced by intense and prolonged thought, was capable of producing the disease, for the result of metabolism was first urea, then, with lessened oxidation, uric acid, and finally oxalate of calcium. Urea was soluble, uric acid (except in combination) not so soluble, and might

be thrown off as calcium oxalate. If the condition of the system was such that neither urea nor uric acid could be formed, then the oxalate was. *Dr. Williams'* paper contained an inconsistency in that oxalates were first said to be produced by nitrogenous and later by saccharine substances. If so, then improper digestion of any food could bring on the disease. The best treatment was hydrochloric acid and vegetable bitters, with proper diet.

Dr. C. R. Robins said the symptoms of the disease were usually well marked and more or less constant, but, as *Dr. Williams* said, the relation of cause and effect had to be considered. He reported the case of a young man who had first been treated by a physician in West Virginia and was sent later to Old Dominion Hospital. There was posterior gonorrhea, with painful and swollen testicles, intestinal indigestion, obstinate constipation, pronounced anemia and marked depression and hopelessness. There was a large amount of urinary sediment, and purulent cystitis was inferred. Microscopical examination revealed a small quantity of pus and also the fact that the sediment, which was about one-thirtieth of the total volume of the urine, was composed almost exclusively of calcium oxalate. The patient had been taking large quantities of Epsom salt for his constipation. *Dr. Robins* said that for some time he had been in doubt of the relationship of urinary sediments to disease—were they causes or effects? Therefore, while treating the patient for the testicular trouble and gonorrhea he concluded to follow out the line of treatment suggested tonight by *Dr. Williams*, i. e., stimulate nutrition. In addition to local treatment, phosphate of sodium was given three times daily before meals to overcome the condition thought to be due to the excessive amount of Epsom salt taken, and hypophosphites as a tonic for the nervous and systemic depression. Examination of urine from time to time showed abatement and final disappearance of the oxalate, and by the time the patient was cured of the gonorrhea he was also cured of his other symptoms. *Dr. Robins* believed this corroboration of the theory that calcium oxalate was more a symptom

than a disease itself. He thought there was a great relationship between nutritive diseases and urinary sediments. Porter says that all kidney diseases have their origin in some vice of nutrition. Bright's disease, for example, was preceded by such a condition of the system that the kidneys were called upon to excrete abnormal substances, and from continued work they became disordered. It seemed that Dr. Williams had pointed out a line along which we could do effective work. We did not know more about this disease because we did not perform routine urinary analyses.

Dr. J. P. Davidson said he had seen a number of cases of retinal hemorrhage in which there were symptoms of chronic nephritis, with absence of albumen, but abundance of calcium oxalate and uric acid in the urine. Whether the cases were those of oxaluria or chronic nephritis was discussed at the time. After repeated urinary examinations albumen was found in some of them, together with casts.

Dr. J. Allison Hodges asked Dr. Williams if, in the examinations of the cases reported by him, he had noticed the proportion of uric acid to alkaline constituents of the urine. All the cases noted, because of their general symptoms, could be put down as lithemic neurasthenia. There was no well-defined line of treatment that would suit every case, although all may show similar symptoms. Such an authority as Dr. Landon Carter Gray acknowledged this, and said he first tried acids, then, if necessary, alkalies, and then intestinal antiseptics. The fact that albumen was found in some cases and not in others was not surprising, for there was a temporary albuminuria that could not be explained. It would appear and disappear without any treatment.

Dr. Wm. S. Gordon remarked that oxaluria was a frequent source of trouble both to patient and physician. He had recently found calcium oxalate crystals in the urine of four cases, each presenting points of interest. One was that of a young woman with hysterical mania; another, a lady at the menopause, with digestive and nervous disorder; another, a

gentleman with gout, uric acid crystals being associated with the octohedral calcium oxalate, and another, a minister, with insomnia, backache, some mental depression and other symptoms of neurasthenia.

Most of the cases of oxaluria under his observation presented some or all of the following symptoms: Digestive disturbance, insomnia, lumbar backache, itching of the skin, urinary irritation and mental disorder in varying degree. The urine was acid, of high specific gravity, as a rule, and more pronounced in color than the normal. The crystals, usually octohedral, were occasionally so minute as almost to escape detection.

The constitutional symptoms were so often different from those of uricacidemia that we were obliged to consider the therapeutics of oxaluria as presenting distinct indications, although the treatment of gout and oxaluria were, to a certain point, identical.

He believed that nephritis, especially the chronic intestinal form, was often caused by the irritant action of calcium oxalate crystals in the kidney. We had no reason for believing that these crystals were formed chiefly in the bladder; therefore, they must be in the blood. Pathologists ought to be able to find them in the blood, but, so far as he knew, the discovery had not been made. More light was needed on this point.

The questions occurred, are the crystals the result of incomplete oxidation in the alimentary canal, or in the tissues? Or were they ever formed in the tubuli uriniferi? When we found the crystals in nervous disorders, were they due to the impaired digestion resulting from the nervous disorder? Did they, then, circulate in the blood and increase the nervous disturbances?

His own belief was that oxaluria originated with imperfect digestion, from whatever cause, and that the crystals were a poison to the nervous system. The good results obtained in most instances by strict regulation of the diet, fresh air, exercise and stomachic digestives and tonics would appear to substantiate this view. At the same time the nerve centers must

often be toned up and stimulated while the digestion was being regulated. Patients frequently did not get well because they were not faithful in carrying out instructions. We shall know more about this interesting question when the physiologist informs us of the true relation of oxalate of calcium to uric acid and urea. Years ago Harley wrote on this subject in a very interesting manner, and his views were practically the same that were now held.

Dr. Williams, in concluding the discussion, said, in answer to *Dr. Wellford*, that *Thompson* was his authority for the statement that bacteria gave rise to calcium oxalate. As to its absorption by the blood, if he admitted that that in the food could be absorbed, then he must admit that that formed in the intestine was also. That minute crystals of calcium oxalate might afterward form large ones was corroborated by *Dr. Gordon*, but the fact was seen also in the production of very large alum crystals. Its derivation from uric acid had been disproved by *Purdy*. Regarding the seeming inconsistency that oxalates were caused by excess of both nitrogenous and carbohydrate foods, he simply stated the various authorities. His own experience was that the former was the liable substance, and part of his treatment was to omit it. *Dr. Robins'* remarks concerning his case were in line with his own views. Concerning *Dr. Davidson's* cases, he would ask if the walls of the retinal blood-vessels were not much thinner than others. Being so, would not mechanical irritation, followed by perforation of the vessels, account for the hemorrhage?

He could not answer *Dr. Hodge's* question as to the proportion of uric acid. In the third case the first urinary examination revealed minute uric acid crystals.

Dr. Gordon was apparently uncertain as to whether the oxalate was a cause or a result, but he was glad, said *Dr. Williams*, that he appeared to believe that the crystals circulated in the blood, for this explained the renal irritation. *Dr. Gordon* spoke of dilute acid, but *Dr. Williams* said his experience was that the freshly-prepared strong nitrohydrochloric acid gave good results when the diluted did not.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

REGULAR MEETING HELD APRIL 11, 1899.

Dr. E. C. Levy, president, in the chair; *Dr. Mark W. Peyser*, secretary and reporter.

Dr. J. Travis Taylor read a paper on "Erythema Scarlatinoides—A Case" (see page 321).

Dr. H. H. Levy said he had seen several cases of erythema scarlatinoides, and related the following:

Case 1 was that of a man, aged twenty-three years, who, considering that he was suffering from biliousness, had of his own accord taken some calomel, etc. When seen there was a temperature of 104° F. and the skin of an intense, dusky red. The patient, judging from previous personal experience, remarked that if he took quinine he would peel. Nevertheless quinine was prescribed, and general peeling occurred, beautiful casts from the palmar surface of the hands and fingers being obtained. Some months later he had another attack, in which similar phenomena of extensive desquamation were presented.

Case 2 was that of a married lady, who suffered every spring from the disease regardless of medicines, and in whom the shedding of palmar and plantar casts and of large strips of epidermis from other surfaces occurred.

Case 3 was that of a young lady, who did not appear sick. There was not much elevation of temperature, but there was a general red, punctated eruption and furred tongue. He assured her mother, who was alarmed, that the disorder was not scarlatina, but that desquamation would occur, and it did so in four or five days. Later there was a second attack, occurring while she was out of town, in which she was attended by a physician, who said there was some little albuminuria at the end of and following the attack.

Dr. E. C. Levy said that while he had seen a number of cases of this affection, his experience was limited to its occurrence as the result of the administration of diphtheria antitoxine. The rashes, which in a considerable percentage of cases followed the injection of antitoxine,

were protean in character. Usually they were urticarial, but at times they resembled very closely the eruptions of the exanthemata, especially scarlatina. The latter class of cases was often most puzzling. While at the Willard Parker Hospital he had frequently seen cases of erythema scarlatinoides which so resembled scarlet fever that the members of both the resident and visiting staffs (all of whom must be considered experts in scarlatina) were utterly unable to decide the true nature of the case. Hence he could not coincide with Dr. Taylor in one point in his excellent paper, that the differential diagnosis was always an easy matter. In many cases the eruption was absolutely typical of scarlatina, and in some instances all the usual concomitant symptoms were also present. Of course, as all the cases he had seen were in diphtheritic subjects, there was always sore throat and frequently albuminuria. This had still further complicated the diagnosis.

In such cases isolation until the true nature of the affection became manifest (which was ordinarily a matter of not more than twenty-four hours) was the course to be followed. So far as his observation went the desquamation in those cases due to antitoxine was always of the furfuraceous type, but, as his experience was limited to about a dozen such cases, he was not prepared to say that it never took the form of casts.

Dr. Taylor, in closing the discussion, said that Jackson was the only author that he could find that mentioned albuminuria as an accompaniment of erythema scarlatinoides.

ASSOCIATION OF AMERICAN PHYSICIANS.

FOURTEENTH ANNUAL SESSION, HELD AT WASHINGTON, D. C., MAY 2, 3 AND 4, 1899.

Dr. M. Allen Starr of New York read a paper on "Tabes." He had examined about 300 cases. We must separate the optic type from the spinal type. The spinal type may be acute or chronic, and in the optic type blindness is most prominent and the earliest symptom. These different types of tabes must be treated in different ways. The system needs building up and dieting to the point of starva-

tion should be avoided. Use electricity, rubbing. Syphilitic treatment should be put off until later, and large doses of the iodides are doubtful. Alcohol may help in moderate doses. Exercise is of great benefit, but it should be used in moderation and should be followed by rest. Good tonics are of more value than other drugs.

Dr. Wharton Sinkler of Philadelphia said he did not believe in large doses of the iodides in these troubles.

Dr. Thomson said he used the actual cautery and red-pepper packs.

Dr. Folsom said he gave the iodides, but he did not mean to say that tabes was a syphilitic disease. Some cannot take these salts and have iodism early, such as edema of the retina. In giving this drug it is important to get the patient under the full effect just as soon as possible.

Dr. Bond believes it is well to give the iodides for a week, and then to stop them for awhile.

Dr. Sachs spoke of the similarity of the types. He thinks there are some cases of acute spinal lues simulating tabes, and that is why the iodides give such good results.

Dr. Carey spoke of the time when the iodides should be given. They should be given on a full stomach from one-half to two hours after eating.

Dr. Janeway said he stuck to the old-fashioned way of giving the iodide with mercury and the compound tincture of cardamom, and under this patients gained weight and improved. He thinks we often give too large doses.

Dr. Folsom gives as much iodide of potash as they can stand, and then give the bichloride to the point of salivation.

Dr. Starr said in closing that it was important to be precise. Some of the best results come from the use of the water treatment and the alternation of heat and cold water. This is a disease of the neurone, but there may be no lesion of the spinal ganglion itself, but in the peripheral nerve endings in the skin and in the spinal cord; therefore, we should help the skin. The feeling that all cases are syphilitic is wrong, and this treatment should be postponed until the system is toned up.

Dr. J. B. Herrick of Chicago read a

paper on "Koenig's Sign in Meningitis." This sign is an inability to extend the leg when the thigh is flexed at right angle to the body. He notes nineteen cases, with six autopsies, and gives the cases in which this sign was present and absent. This sign is present in 80 to 90 per cent. of the cases seen, and is only exceptionally present in other affections. The technique is simple. It does not come from intracranial pressure.

Dr. Osler does not think the sign has been of such great help in diagnosis, but in certain cases it might prove to be of great value. It is an interesting sign, and the experience of *Dr. Herrick* and others shows that it is present in a large number of cases.

Dr. Griffith said he had found it in two cases which he saw just before he left home, and the presence of this sign was of great help to him.

Dr. J. C. Wilson of Philadelphia related a case of "Astasia-Abasia." This trouble has attracted very little attention in America. In looking up the literature on this trouble he found out of forty-three titles, twenty-two French and five American. This case of his was a man twenty-four years old of good stock. His mother was epileptic, and he had some ancestral histories of morphia and dipsomania. He was shocked by the receipt of a telegram and was not able to walk. He said his leg felt as if it was made of copper, which is a very characteristic description. He had very irregular muscular movements. He was given the valerianate of zinc, one grain three times a day, with massage and faradization, and in two weeks he could walk better. It was a symptom of hysteria. This case was discussed by *Drs. Jacobi, Thomson, Henry*, who said he had seen a similar case, and *Dr. Wilson* said, in conclusion, most of such cases occur in winter.

Dr. John K. Mitchell of Philadelphia reported a case of "Periodic Family Paralysis." This is a rare disease in this country, and is evidently caused by some poison within the body causing this morning paralysis. This case is hereditary.

Dr. Putnam said that he had seen an analogous case.

MEDICAL AND CHIRURGICAL FACULTY OF THE STATE OF MARYLAND.

CENTENNIAL MEETING HELD AT BALTIMORE
APRIL 25, 26, 27 AND 28.

THURSDAY, APRIL 27—THIRD DAY.

THIS day was given up to clinics and demonstrations at the University of Maryland, the Baltimore Medical College, the Woman's Medical College and the Maryland Medical College. In the afternoon all the institutions on the west side of the city were open for inspection, and at Mount Hope Retreat for the Insane a most sumptuous lunch was offered. The clinical lectures at the University of Maryland were held by *Drs. Tiffany, I. E. Atkinson, Ashby and J. C. Hemmeter*, and a demonstration by *Dr. W. R. Stokes*.

Dr. J. C. Hemmeter gave an "Electrical Illumination of the Stomach" at the University of Maryland. He explained his method of intubating the duodenum. The tiny electric light, around which cool water is kept flowing to make it cool, is swallowed by the patient to be examined, this individual having first swallowed some ice water to still further cool down the stomach. Through the abdominal walls the tiny light could be seen and the size and position of the stomach could be mapped out. While this is of no great practical use so far, still it is of some assistance in diagnosing certain cancerous growths and other abnormalities of the stomach.

Dr. W. R. Stokes of the health department then described the "Municipal Bacteriology," demonstrating the workings of this laboratory, and especially did he speak of diphtheria antitoxine. The room disinfection with formaldehyde gas was also explained by *Dr. Stokes*.

At the Baltimore Medical College there were clinical lectures and demonstrations by *Drs. Potter, Whitney, Hill, Merrick, Moseley, Earle, Blake and R. W. Johnson*.

Probably the most original work in this school was the explanation by *Dr. R. W. Johnson* of his proposed "Turning Off the Carotids," in operations on the head and neck. This he has never yet tried on a human being, but he feels sat-

ified from his work on dogs that it is practicable and easy. In operations such as removing of scalp vascular tumors or in any case where it is desirable to shut off the blood supply he exposes the carotid of the side desired, passes a ligature loosely around it without tying it tight and puts the two ends knotted through a slit in a short stick which the assistant holds. By raising up this stick the carotid on either or on both sides could be compressed and the blood supply shut off. Dr. Johnson is very sanguine about the success of the use of this method in human beings, and said that he could compress the carotids for ten minutes and even longer in the dog, and feels sure that the same pressure could be kept up for the same time in man without harm.

Besides the Woman's Medical College which was open, clinical lectures and demonstrations were held in the Maryland Medical College by Drs. Hodgdon, Kintzing and Branham. After luncheon, which was served at the hall of the Faculty, the afternoon scientific session began at 3 o'clock.

Dr. E. H. Bradford of Boston then gave some results of "A Study of the Human Gait" (to appear later).

Dr. A. Jacobi of New York read a very interesting paper on "European Medicine About 1799" (to appear later).

Dr. H. C. Wood of Philadelphia read a most vigorous and forcible paper on "Nostrums, the Profession and the Law" (to appear later).

Dr. Roswell Park of Buffalo read a paper on "Cancer as a Parasitic Disease" (to appear later).

Unfortunately, Drs. E. G. Janeway and Samuel Alexander were absent. In their places Dr. William H. Welch referred to the excellent chronological exhibition of medical literature and briefly gave a sketch of it. Medicine is divided into ancient, medieval and modern. The most ancient literature is found in the papyrus of George Ebers and it is probably about 2000 years old. Photographs of the original in the British Museum were shown, and in this work castor oil and opium are mentioned. This series of works is illustrated by authors throughout the whole period from 2000 B. C. to the present time.

At night the annual banquet was held at Rennert's Hotel, and about 250 physicians sat down. Among the after-dinner speakers were Surgeon-General Sternberg, Dr. James Tyson and Dr. H. C. Wood of Philadelphia; Dr. George Ben Johnston, Dr. C. Birnie and President D. C. Gilman of the Johns Hopkins University. Others at the head table were Dr. A. Jacobi of New York, Dr. Roswell Park of Buffalo, Dr. W. W. Johnston of Washington and Dr. S. Solis-Cohen of Philadelphia.

FRIDAY, APRIL 28—FOURTH DAY.

The final day of this meeting was begun by an exhibition of cases and methods by Dr. R. Tunstall Taylor at the Orthopedic Hospital. Here apparatus and appliances were exhibited and explained. Later in the day special trains took the members to more outlying asylums, where handsome luncheons were served. The exhibition of old portraits and relics was unique and merited a careful examination. Among them were portraits, paintings, diplomas, account-books, instruments of the Maryland physician 100 or more years ago. The portrait and diploma of Dr. John Archer, the first person to receive a medical diploma in the United States, were shown. Dr. Archer received his degree at what is now the University of Pennsylvania in 1768.

At 8 P. M. the business meeting was held. Dr. Chew presided, and Drs. Lord, R. T. Wilson and H. O. Reik acted as secretaries.

Reports from various committees were read and approved, and the following officers were elected:

President, Dr. Clotworthy Birnie; vice-presidents, Dr. Samuel Theobald and David Streett; secretary, Dr. J. Williams Lord; treasurer, Dr. Thomas A. Ashby; executive committee, Drs. William Osler, L. McLane Tiffany, Samuel C. Chew and Charles G. Hill; examining board for the Western Shore, Drs. M. B. Billingslea, W. F. A. Kemp, H. W. McComas, H. M. Wilson, J. T. Smith, W. W. White, L. G. Smart; examining board for the Eastern Shore, Drs. J. P. McCormick, B. W. Goldsborough, W. Frank Hines, James Bordley, J. H. Jamar.

These committees for the ensuing year were appointed by the Chair:

Library—Drs. George J. Preston, William Osler, E. F. Cordell, Harry Friedenwald, Stewart Paton.

Publication—Drs. J. Williams Lord, T. A. Ashby, J. M. Craighill, S. K. Merrick, H. O. Reik.

Memoir—Drs. E. F. Cordell, H. M. Hurd, R. F. Gundry, A. K. Hadel, J. M. Humrichouse.

Ethics—Drs. B. B. Browne, John Neff, J. L. Ingle, James Bordley, I. R. Page.

Programme—Drs. H. B. Jacobs, R. W. Johnson, W. S. Gardner, H. H. Biedler, W. W. Russell.

Legislation—Drs. E. N. Brush, C. G. Hill, M. B. Billingslea, J. M. A. Bate-man, J. D. Blake.

Membership—Drs. W. S. Thayer, C. W. Mitchell, A. D. Atkinson, J. M. H. Rowland, J. D. Iglehart.

General Sanitation—Drs. C. Hampson Jones, E. M. Schaeffer, Mary Sherwood, Louise Erich, W. F. Hines, J. S. Fulton.

Finance—T. A. Ashby, J. McP. Scott, L. McL. Tiffany, Wilmer Brinton, William Whitridge.

County Medical Societies—Charles M. Ellis and others to be added.

The appointment of a special committee was recommended to go before the legislature and induce that body to pass a law requiring a four-years' medical course in the State of Maryland. Dr. Osler offered a motion that steps be taken to secure enlarged headquarters as the home of the Faculty.

Dr. E. N. Brush was chosen a trustee, vice Dr. George J. Preston, term expired, and Dr. Charles M. Ellis was made a trustee, vice Dr. George H. Rohé, deceased. Dr. W. W. Keen of Philadelphia was made an honorary member.

These new members were elected:

Drs. L. M. Allen, William Stevenson Baer, Chas. D. Baker, William Hewson Baltzell, Arthur G. Barrett, Bernard Barrow, G. Irvin Barwick, John R. Benton, Joseph E. Boetly, James Bordley, Jr., S. A. Boucher, Thomas Richardson Brown, Chas. J. Carey, James J. Carroll, Fred Caruthers, E. G. Clark, Harry C. Chappelear, Charles Cockey, John Alex. Coe, Philip Eugene Craig, William Henry

Crim, John Cronmiller, Benjamin Reed Davidson, Edwin J. Dirickson, Samuel C. Dudley, E. C. Etchison, H. P. Fahrney, S. G. Fisher, Charles R. Foutz, Calvin N. Gabriel, Abram B. Gaither, Gustav Goldman, J. F. H. Gorsuch, John C. Hackett, Archibald C. Harrison, Joseph T. Her-ing, Mallon C. Hinebaugh, Ellsworth H. Hinman, Joseph W. Holland, William H. Howell, Mareen D. Humes, Reid Hunt, Richard Hall Johnston, Samuel Kahn, William J. Kasten, Charles J. Keller, Charles P. Kemp, C. H. Latimer, J. W. Leitch, G. Milton Linthicum, Thomas H. Lynch, T. B. Mardeen, Harold B. Miller, William B. Morrison, Arthur T. Newcomb, Henry William Nolte, Thomas B. Owings, Robert Stevens Page, Robert Vickery Palmer, O. P. Penning, Clement A. Penrose, Jephtha E. Pitsnogh, H. Revell, William Whittall Requardt, Herbert L. Rich, T. L. Richardson, Reverdy Sasscer, John E. Saulsbury, Thomas L. Savin, Walter O. Selby, William S. Seymour, Samuel K. Snively, St. Clair Spruill, George L. Staley, Daniel Edwin Stone, William D. Straugher, A. E. Sudler, Harrison Tongue, Richard W. Trapnell, David F. Waddell, H. R. Walton, J. H. W. G. Weedon, Charles A. Wells, Levin West, H. Young Westbrook, Andrew H. Whitridge, S. Kennedy Wilson, W. W. Wiley, E. Williams, John S. Ziegler, J. W. Cole, Charles E. Postley, Calen N. Athey, James S. Woodward, Ernest Rowland, Joseph E. Muse, Thomas Barnes Fletcher, August Stabler, E. E. Stonestreet.

The names of all visitors registered on the books of the society are given below. Where no address is given the residence is Baltimore. The list, arranged in alphabetical order, is as follows:

J. Fred Adams, Maryland; Harry Adler, John Ayd, John J. Abel, A. McG. Belt, Walton Bolgiano, Charles C. Bombaugh, J. H. Branham, Phelps Briscoe, Calvert county; H. H. Biedler, A. G. Barrett, Dr. Budd, Petersburg, Va.; W. K. Butler, Washington, D. C.; G. M. Brumbaugh, B. J. Byrne, Ellicott City; James Bordley, Jr., John D. Blake, W. Hewson Baltzell, A. K. Bond, Frank C. Bressler, Thomas H. Braydam, Maryland; Joseph C. Bloodgood, Francis E. Brown, C. E.

Chears, New York; F. J. Cameron, T. M. Chaney, Dunkirk, Md.; John Cronmiller, Laurel, Md.; Eugene F. Cordell, J. Frank Crouch, Henry F. Cassidy, Roland Park; James M. Craighill, Baltimore; Charles Cockey, Queenstown, Md.; Claribel Cone, Charles F. Davidson, Queenstown, Md.; B. R. Davidson, Davidsonville, Md.; Dr. Deck, Sidney, Australia; Eugene Douglass, Walter B. Dent, St. Mary's county; S. Griffith Davis, Jr., Britton D. Evans, Morris Plains, N. J.; Samuel T. Earle, Jr., Louise Erich, Saml. J. Fort., Ellicott City; W. H. Feldman, J. W. Funck, P. S. Field, P. W. Fairchild, New York; John S. Fulton, G. W. Foster, Washington; James E. Gibbons, R. F. Gundry, Catonsville; J. E. Gickner, Alfred B. Giles, W. B. Gambrell, Alberton, Md.; Nathan R. Gorter, J. W. Humrichouse, Hagerstown; J. C. Hackett, Kent county; E. H. Hinman, Calvert county; W. F. Hall, Crisfield, Md.; B. Merrill Hopkinson, Jose L. Hirsh, M. C. Hinebaugh, Oakland, Md.; John C. Harris, John C. Hemmeter, Dr. Haynes, Petersburg, Va.; J. W. Hirst, Birmingham, Ala.; Arthur Hebb, John T. Hammond, Berlin, Md.; Howard R. Hopkins, Wye Mills, Md.; J. T. Holland, Arthur P. Herring, J. D. Iglehart, John H. Jamar, Elkton, Md.; John J. R. Krozer, William Kroh, W. F. A. Kemp, J. W. Leitch, Huntington, Md.; Thomas S. Latimer, W. M. Lewis, J. P. Lawlor, J. W. Lazear, James J. Mills, Wm. E. Moseley, Edw. E. Mackenzie, W. B. Munnikhuisen, Belair, Md.; Peter S. Mallou, Morris Plains, N. J.; A. D. McConachie, Standish McCleary, C. C. McDowell, Jno. Neff, L. E. Neale, Winton M. Nihiser, Keedysville, Md.; Nathan T. Newcomb, Charles S. Neer, Wm. Osler, Henry C. Ohle, Edward R. Owings, Robert V. Palmer, Palmer, Md.; J. B. R. Purnell, Snow Hill, Md.; John U. Pickel, T. Chalmers Peebles, Lutherville, Md.; Henry O. Reik, George H. Riggs, Ijamsville, Md.; Ferdinand Reinhard, Wm. Requaardt, James Ross, Dundas, Ontario; J. Holmes Smith, W. L. Smith, Jarrettsville; Franklin Buchanan Smith, Frederick, Md.; Alan W. Smith, J. McP. Scott, Hagerstown, Md.; Saml. H. Speake, Charles county; David Streett, Charles E. Sadtler, William S. Seymour, Trappe,

Md.; Wesley C. Steck, Glenville, Pa.; W. C. Sandrock, W. T. Skinner, Glasgow, Md.; Purnell F. Sappington, Govans-town, Md.; Geo. L. Staley, Cecil C. Stewart, A. J. Sauer, Wm. Royal Stokes, J. S. Stone, Washington, D. C.; T. Littleton Savin, W. F. Taylor, Laurel, Md.; Richard H. Thomas, W. Guy Townsend, Samuel Theobald, Wm. J. Todd, Mt. Washington; M. L. Todd, J. Howard Uhlig, Wye Mills; Charles Vogel, W. W. Wiley, Cumberland, Md.; D. F. Waddell, Millington, Md.; Charles W. Wainwright, Princess Anne, Md.; H. M. Wilson, A. G. Watson, Randolph Winslow, J. Percy Wade, Catonsville, Md.; Joseph O. Wunder, J. T. Waltemeyer, Alberton, Md.; Lilian Welsh, J. S. Woodward, Sparrow's Point; Razan A. H. Williams, Hagerstown, Md.; James A. Zepp.

MARYLAND PUBLIC HEALTH ASSOCIATION.

THIRD ANNUAL MEETING, HELD AT BALTIMORE, MAY 11 AND 12, 1899.

AFTER an address of welcome by the president, Dr. Edward M. Schaeffer, C. F. Langworthy, Ph.D., of the United States Department of Agriculture, read a very exhaustive paper on "Foods and Their Nutritive Value," reviewing the experiments of Professor Atwater, speaking of the kinds and amounts of food persons require, and thought that in each household there should be some one who understood the value of food. This subject was discussed by Drs. Hemmeter and Gickner, and on motion of Dr. Fulton a food and cooking committee was formed, appointed to propagate popular knowledge on this subject.

In the afternoon Dr. Edward J. Dirickson of Berlin, Md., spoke of the "Cumulative Power of Infection in Neglected Barnyards;" Dr. A. W. Clement, the State veterinarian, read a paper on "The State Inspection of Cattle as Regards the Consumption of Milk;" Mr. James U. Dennis of the Baltimore bar and Dr. H. O. Reik read papers on "Vaccination" from a legal and medical standpoint, and Dr. C. Hampson Jones, the health commissioner, impressed on the audience "The Need of a Municipal Hospital for Infectious Diseases."

On Friday, Dr. J. H. McCormick of Gaithersburg read a paper on "Some Problems of Rural Sanitation;" Dr. T. M. Chaney of Dunkirk suggested a way "How to Collect the Vital Statistics of a County;" Dr. A. K. Bond read a paper on "Some Causes of Ill-Health Among City Children;" Dr. S. J. Fort on "Special Schools for Special Children," and Dr. James Bordley of Centreville read a paper on "School Hygiene." The rest of the meeting was given up to the ladies. Mrs. E. A. Robinson spoke of the "Cigarette Habit Among Growing Boys;" Miss Elizabeth T. King spoke of the "Janitor Service in the Public Schools;" Miss Ella V. Ricker read a paper on "Teaching Hygiene to Children," and Miss Agnes McLean spoke of "Voice Training." The following officers were elected:

President, Mr. Charles R. Hartshorne of Brighton; vice-presidents, Dr. Howard Bratton of Elkton, Dr. T. M. Chaney of Dunkirk, Dr. John F. Hancock, Mrs. Daniel Miller and Miss Eliza Ridgely of Baltimore; secretary, Dr. John S. Fulton; assistant secretary, Dr. Samuel J. Fort of Ellicott City; treasurer, Dr. L. Gibbons Smart of Roland Park.

Committees were appointed as follows:

Food and Cooking—Mrs. Daniel Miller, Dr. John F. Hancock, Dr. John C. Hemmeter, Dr. Joseph E. Gichner, Dr. John S. Fulton and Dr. E. M. Schaeffer.

Rohé Memorial—Drs. Louise Erich, William J. Todd, William H. Welch, S. J. Fort, C. Hampson Jones, W. R. Stokes, John S. Fulton, H. O. Reik and E. M. Schaeffer.

School Hygiene—Mrs. Alcaeus Hooper, Dr. Mary Sherwood, Dr. Lillian Welsh, Mrs. Laura P. Todd, Miss Ella V. Ricker, Mr. M. B. Nichols, Mr. Henry Brauns, Drs. A. E. Sudler, Howard Bratton and E. M. Schaeffer.

The executive committee, consisting of the president, vice-presidents, secretary and treasurer, will appoint a committee on legislation and select time and place for the fall meeting.

The meeting, which may have been a little trite for the physician, was withal full of suggestions, and the excellent work disseminated among the people will materially advance the cause of health in

Maryland. The men were not especially gallant in upholding the paper on cigarettes, but they had their opportunity of depicting the horrors of tight lacing and did not avail themselves of it. The Homeopathic Society, just adjourned, has put itself on record as opposed to the cigarette for the young boy. Dr. Schaeffer is to be congratulated on his excellent work, which has been the support of this association since its inauguration.

THE INDIRECT TREATMENT OF HEPATIC CIRRHOSIS.—Cardarelli (British Medical Journal) deals chiefly with the treatment by milk diet, of which he speaks highly. In the cases in which it does good the urine increases in quantity, the urea increases and the urerythrin disappears. These good effects may not be seen all at once; they may be delayed, especially where there is much abdominal tension. Small quantities (half a liter or even less) should be given at first. If milk cannot be borne, large doses (forty to fifty grammes) of lactose may be given in weak broth. To test the power of absorption the author recommends an enema containing five to six grammes of salicylate of soda, which may be looked for in the subsequent urine. The most reliable indication for paracentesis abdominis where there is ascites is the quantity and quality of the urine and the presence of edema of the lower extremities. In performing paracentesis the author prefers the gradual method of extraction by Southey's tubes.

* * *

BRAIN ANATOMY AND PSYCHOLOGY. Dr. Stewart Paton of Baltimore contributes to the American Journal of Insanity a paper on the above topic in which he aims to show the dependence of the new psychology and the new psychiatry upon a knowledge of cerebral structure. Patience is necessary in such a difficult study. It is not yet possible to classify the normal and abnormal processes, but a beginning of a more rational study of both the normal and abnormal workings of the mind has been made. The subject is not an easy one, and much is expected from such patient and careful investigators.

MARYLAND

Medical • Journal.

PUBLISHED WEEKLY.

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MARYLAND MEDICAL JOURNAL,

Fidelity Building, Charles and Lexington Streets.
BALTIMORE, MD.

WASHINGTON OFFICE:

Washington Loan and Trust Company Building.

BALTIMORE, MAY 20, 1899.

WITH each change in political power in Baltimore there is usually a clean sweep of all the offices, and one health commissioner makes way for another, not on account of any superiority, but more as a reward for faithfulness to the party. The medical profession has little weight in matters political, and this should not be. Dr. McShane had been in the health department as assistant and afterwards as chief for many years and had naturally learned a great deal which a newcomer could not know, and hence the medical profession were united in recommending him. The unfortunate termination of his position had nothing at all to do with his ability as a health officer. The present health commissioner, Dr. Jones, as far as can be seen, has been an efficient and active man and has been ever ready to do his work conscientiously and thoroughly, but he had to learn his trade, as it were, and now just as he is becoming fit to fill his position politics will demand that he step out and another one, who will start without experience, is to take his place.

The most active candidate so far is Dr. John B. Schwatka, an excellent physician, extremely popular and with hosts of friends and admirers. He will most likely obtain the coveted place, and he will probably be able to fill it after he has mastered the routine of the work, but he will be appointed not so much on account of his fitness, but as a reward for his close adherence to the democratic party. Dr. G. Milton Linthicum is mentioned as the assistant health commissioner, and for him it may be said that the office will be fortunate in obtaining such a good man.

All this, however, does not sanction the method of appointment, and it is, perhaps, a little too Utopian to expect more. What really should be done is this: Some good man, fitted for the place, and who would be willing to give his life to the work, should be taken up by the medical profession and backed entirely on the ground of his fitness, and the Medical and Surgical Faculty and the local societies should endorse him. A good health commissioner should be a man not only with experience as a sanitary expert and hygienist, but he should be free from theories which cannot be applied, and he should have good common sense and a knowledge of human nature. Many wrongs can be righted by a little tact and strategy, even though the law demands immediate obedience. The medical profession is easily carried away and many of its members will endorse any and all candidates with a desire to be pleasant to all. The Maryland Public Health Association, which has just closed its annual session, might be able to offer some valuable suggestions as to the choice of a city health officer.

The State Board of Health has a secretary who is making his work his specialty, and he will likely be kept in office as long as he does his work. Why should not the city be treated as well? Many offices in the gift of the dominant party are simply clerical and can be filled by unskilled workmen. A good business man can soon learn the routine of the collector's office, but what man could attend to the duties of city solicitor or engineer without some special knowledge? Why, then, appoint the health commissioner, a man so important in time of epidemics, simply on his political fitness? The new mayor has a great responsibility before him and the medical profession should not be too indifferent on this question.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending May 13, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	..	..
Pneumonia .....	..	23
Phthisis Pulmonalis.....	1	16
Measles	16	..
Whooping Cough.....	3	..
Pseudo-Membranous Croup and Diphtheria. }	14	4
Mumps.....	..	..
Scarlet Fever.....	6	..
Varioloid .....	..	..
Varicella	2	..
Typhoid Fever.....	*2	..
La Grippe.....	..	2

*1 case imported from Virginia.

Dr. J. C. Clark has submitted his first report of the "Second Asylum."

Tropical diseases will be studied at the Johns Hopkins Hospital next autumn.

Dr. Samuels has succeeded Dr. Lobelman as resident physician at the Hebrew Hospital.

Some generous citizens of Baltimore have given enough money to equip the summer baths.

The Homeopathic Hospital of Wilmington, Del., has received \$10,000 from four generous citizens.

Drs. Charles H. Thomas, Joseph E. Heard and Louis E. Conradi have been appointed police surgeons for the Baltimore police.

Dr. Henry B. Lazear, a prominent physician of Morgantown, W. Va., died suddenly last week, aged sixty-nine. He was a graduate of Jefferson Medical College.

Dr. H. C. Wood, president of the National Convention for Revising the United States Pharmacopeia, gives notice of a meeting to be held in Washington in May, 1900.

Dr. Samuel Budd, a well-known and popular physician of Petersburg, Va., died recently in Baltimore, aged forty-seven. Dr. Budd received his degree from the Bellevue Hospital Medical College in 1875.

At the annual meeting of the Cecil County Medical Society, held at Elkton, Md., April 13, the following officers were elected for the ensuing year: President, Dr. John H. Hard-

castle of Cecilton; secretary, Dr. Harry P. Hinchcliffe of Elkton, treasurer; Dr. John H. Jamar of Elkton.

The Third International Congress for Gynecology and Obstetrics will be held at Amsterdam August 8 to 12. Among those taking part will be Dr. Howard A. Kelly of Baltimore. The official languages are English, French, German and Italian. Dr. J. D. Emmett of New York is the American secretary.

Arrangements are being made for special rates, train service, and so on, for the Columbus meeting of the American Medical Association, June 6-9. Those intending to go and desiring to take advantage of such arrangements as can be made, will kindly address, as soon as possible, Dr. H. O. Reik, No. 5 W. Preston St., Baltimore.

The American Medico-Psychological Association, of which Dr. Henry M. Hurd is president, presents a most attractive and elaborate programme for its fifty-fifth annual meeting to be held at New York May 23, 24, 25 and 26. Among others papers will be read by Drs. Henry M. Hurd, Henry J. Berkley, Stewart Paton and Charles G. Hill of Baltimore.

The Somerset County Medical Society was organized in Princess Anne, with the following officers: President, Dr. D. W. Jones; vice-president, Dr. G. D. Atkinson; secretary, Dr. C. W. Wainwright; corresponding secretary, Dr. M. W. G. Goldsborough; treasurer, Dr. Monmonier Rowe. A committee was appointed to draft by-laws for the government of the organization and to report at its next meeting. Among the Somerset physicians in attendance were Drs. Wm. H. Gale, John Dale, C. Paul Jones, Rufus W. Dashiell, Chas. W. Wainwright, Martin W. Goldsborough, Monmonier Rowe and Dr. Hall of Crisfield.

A large gathering of physicians of Prince George's county assembled at Upper Marlboro and perfected the organization of the Prince George's County Medical Association. Dr. Charles A. Wells of Hyattsville was chosen president; Dr. French Owens of Marlboro, secretary; Dr. M. D. Hume, vice-president, and Dr. L. A. Griffith, treasurer. The finance committee is composed of Drs. Sansbury, Bird and Latimer. The executive committee elected consists of Dr. C. A. Fox, Dr. Ryon and Dr. Warren. The annual meeting of the society will be held in May of each year at Upper Marlboro. The next meeting will be held in Hyattsville June 13.

Washington Notes.

Nineteen men graduated from the medical department of the Howard University.

Cerebro-spinal meningitis continues to do business in its usual way. Over sixty deaths have been reported within seven weeks.

The number of smallpox cases are being received and dismissed from the hospital in about the same ratio. There are now twenty-seven cases in the hospital.

In a medical school the hours of care and study are unusually long and the needed air and exercises much neglected.—Prof. J. M. Taylor, address before Georgetown graduates.

At the Medical Society of the District of Columbia Wednesday evening Dr. McCormic read a paper upon "Some Medico-Legal Aspects of Railroad Injuries;" Dr. McArdle and Professor Wiley presented an article on "Cod-Liver Oil."

The new building for the Foundling Hospital is under process of erection upon the nine acres of country land recently secured. Over \$10,000 have been donated and about \$5000 more is necessary for the completion of the building.

At the Medical Society Wednesday evening Dr. Kober read a paper, "Effects of Modern Firearms in War;" Drs. La Garde, Borden and Munson, U. S. A., "Gunshot Wounds as Observed in the Spanish-American War." Illustrated by lantern slides of x-ray photographs made by Drs. Borden and Gray. Transportation of wounded, etc., prepared by Dr. M. W. Gray at Cuba and Porto Rico.

The commencement exercises of the School of Medicine of the Georgetown University was held Monday evening. The address to the graduates was made by Prof. John Madison Taylor of Philadelphia. The following gentlemen received the degree of doctor of medicine: F. C. Baker, District of Columbia; J. H. Bute, Texas; H. R. Hummer, District of Columbia; C. P. Hutchinson, Virginia; D. J. McCarthy, Massachusetts; J. C. McClure, New Jersey; James Miller, Ohio; D. D. Mulcahy, District of Columbia; W. P. Reeves, Maryland, and J. F. Wallace, Kansas. Dr. Daniel J. McCarthy received the appointment of physician resident of the Georgetown University Hospital.

Book Reviews.

THE AMERICAN YEAR-BOOK OF MEDICINE AND SURGERY: Being a Yearly Digest of Scientific Progress and Authoritative Opinion in All Branches of Medicine and Surgery, drawn from Journals, Monographs and Text-Books of the Leading American and Foreign Authors and Investigators. Collected and arranged under the general editorial charge of George M. Gould, M.D. Philadelphia: W. B. Saunders, 925 Walnut street. 1899.

Gould's American Year-Book for 1899 appears promptly, and has the merits of the previous volumes. The list of contributors comprises well-known names, and the work represents a very careful analytical review of the literature for 1898. The Year-Book includes not only an admirable summary of everything relating to practical medicine, but there are very important chapters on anatomy, physiology and physiological chemistry. Any physician who wishes to keep "posted" cannot afford to be without a copy of Gould's Year-Book.

THE PHILADELPHIA MONTHLY MEDICAL JOURNAL. Vol. I, No. 3. March, 1899. \$1 a year.

This is a sort of "overflow" journal of the weekly. It contains very valuable matter and will be worth reading and preserving if kept up to its present standing. Nos. 1 and 2 will soon follow, and then the regular order will be preserved. The appearance of this monthly is far from attractive. It looks undressed.

REPRINTS, ETC., RECEIVED.

Resection and Ignipuncture of the Ovaries. By Hunter Robb, M.D. Reprint from the *Cleveland Medical Gazette*.

Abdominal Section on a Patient Suffering from Exophthalmic Goiter. By Charles P. Noble, M.D. Reprint from the *American Gynecological and Obstetrical Journal*.

A Case of Abnormally High Temperature Subsequent to an Attack of Tertian Ague. By S. Grainger, M.D. Reprint from the *Canadian Journal of Medicine and Surgery*.

Closure of Vesico-Vaginal Fistula Following Vaginal Hysterectomy and Other Operative Procedures by the Vaginal Route. By Charles P. Noble, M.D. Reprint from the *American Gynecological and Obstetrical Journal*.

MARYLAND MEDICAL JOURNAL

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BALTIMORE, MAY 27, 1899.

Whole No. 948

Original Articles.

RECENT INVESTIGATIONS UPON MALARIA.

By W. S. Thayer, M.D.

REPORT OF REMARKS AT THE JOHNS HOPKINS HOSPITAL ON THE OCCASION OF THE CENTENNIAL MEETING OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

DR. THAYER spoke in brief as follows: In the short time allotted to him he wished to say a few words especially upon recent work with regard to the manner of infection in malarial fever.

Up to the last year our ideas as to the manner of infection in malaria have been mainly speculative. There have been three chief hypotheses:

- (1). That the disease was acquired through the gastro-intestinal tract.
- (2). That infection took place through the inhaled air.
- (3). That the poison might gain access to the body through the bites of insects.

The solution of this problem has been greatly delayed by our ignorance as to the form in which the malarial parasites exist outside of the human body. Experiment and analysis of the evidence goes to show that there is little to support the view that the disease may be acquired through the gastro-intestinal tract. Experiments by Mariotti and Ciarocchi, Marchiafava and Celli, Marino, Zeri, Grassi and Feletti have shown that the administration of large quantities of water from highly malarious districts, by the mouth, by rectum and by inhalations, as well as the actual ingestion of blood containing living malarial parasites, is incapable of causing infection.

And while in the absence of our knowl-

edge of the form in which the parasites exist outside of the body it is difficult to positively disprove the possibility that the disease may be acquired by inhalation, there is no thoroughly satisfactory evidence in its support.

On the other hand, it has been known for many years that inoculation, subcutaneous or intravenous, of the blood of an infected individual will transfer the disease. Some years ago Laveran advanced an hypothesis that infection might take place through the bites of mosquitoes. Since this expression of opinion several other similar diseases in animals, diseases due to hematozoa, have been shown to result from the bites of insects. Thus the parasite of Texas cattle fever, an organism in many ways similar to the malarial parasite, has been shown by Prof. Theobald Smith to be transmitted by the bites of the cattle tick (*Boophilus bovis*), while the Tsetse fly disease, or Nagana, is introduced through the bites of the Tsetse fly.

More recently Patrick Manson of London has been an ardent supporter of the idea that the mosquito might play an important part in malarial infection.

Dr. Thayer then reviewed briefly the ordinary intracorporeal cycle of the malarial parasite, calling attention to the fact that in all varieties of the parasite certain forms upon reaching maturity fail to sporulate, but in many instances after five, ten or fifteen minutes of observation undergo a process of flagellation which was early described by Laveran, the separate flagella breaking away often from the mother element, moving about rapidly in the blood with an active serpentine motion. There has been much dispute as to the significance of these elements. Laveran believed that they represented a very im-

portant stage in the life-history of the organism, while Dock first suggested that they might be bodies intended to preserve the life of the parasite outside of the human body. The Italian observers, as a rule, vigorously opposed these views, believing that flagellation was a degenerative process.

Manson, who had demonstrated the fact that the mosquito forms an intermediate host for the *filaria sanguinis hominis*, ventured the hypothesis that this insect might play a similar part in connection with malaria. Surgeon-Major Ronald Ross, acting upon the suggestion of Laveran, observed the development of flagellate bodies in the fresh blood within the stomach of the mosquito. This single observation was not remarkable, inasmuch as the same is often noticed when mature parasites are observed for a sufficient length of time outside of the human body. But afterwards, in carefully studying mosquitoes, he observed remarkably large pigmented structures in the stomach wall of several insects which had previously bitten infected human beings. The pigment in these structures was so similar to that previously contained in the malarial parasite that the observer was impressed with the possibility that these elements might represent some extracorporeal stage in the life-history of the malarial organism. At this stage in Ross' researches the malarial season came to an end and he was obliged to continue his studies upon the parasites of birds, which, as is well known, are closely similar to those of human malaria. The results of these observations of Ross form the most important contribution to our knowledge of this subject that has been made since the discovery of the parasite by Laveran. If a certain variety of mosquito, the gray mosquito (*Culex pipiens*), be fed upon birds infected with the *proteosoma* (Labbé), there appear, two days after feeding, in the wall of the middle intestine of the insect, pigmented bodies similar to those just described. These structures gradually increase in size until at the end of the seventh day they are as large as sixty micromillimeters. They have a distinct capsule, and contain a granular material showing

at first a few pigment granules, which afterwards disappear. On reaching maturity they protrude from the surface of the mosquito's intestine into the body cavity. Shortly after this period rupture occurs and a large number of small spindle-shaped trypanosome-like bodies escape which enter the circulation of the mosquito. Ross further discovered that many of these accumulate within the cells of the veneno-salivary gland of the mosquito. The outlets of this gland unite into a common duct, which descends to the extremity of the mosquito's proboscis. The discovery of these spindle-shaped bodies in the cells of the salivary gland instantly suggested to Ross a possible method by which infection might occur. And experiments showed that mosquitoes fed a proper length of time before upon infected birds were capable of transferring the disease to non-infected birds in almost every instance. Ross' admirable experiments conducted with the parasites of birds, the nature and behavior of which is so similar to those of the malarial parasites that they have by some individuals been considered to be the same organism, abundantly justified the suspicion that similar conditions might exist with the parasites of human beings.

At the same time, independently of Ross' work, Italian observers, Bignami, Grassi and Dionisi, had come to the conclusion from careful study of the etiological conditions of the disease, that the theory of infection through the bites of mosquitoes was by far the most probable hypothesis in connection with malarial fever in man. Grassi had gone so far as to narrow down upon two particular varieties of mosquito, the *Anopheles claviger* and the *Culex penicillaris*, as the probable varieties of mosquito which were capable of inoculating the disease. The ordinary house mosquito, the *Culex pipiens*, that in which Ross had been able to cultivate the parasites of birds, Grassi believed to be harmless. Bignami, indeed, succeeded apparently in inoculating with malaria a human being who had voluntarily subjected himself to the experiment, by subjecting him to the bites of these suspicious varieties of mosquito.

Ross communicated the results of his experiments to the Italian observers, sending them specimens illustrative of the conditions observed, and during the months of November, December and January, Grassi, Bignami and Bastianelli succeeded in completely confirming all that Ross has found in birds upon the human being. They have shown that if examples of the *anopheles claviger* be placed upon an individual infected with malaria, in whose blood full-grown forms capable of flagellation exist, bodies almost exactly similar to those described by Ross appear on the second day in the stomach wall of the insect, undergo similar processes of development and rupture, setting free the same small spindle-shaped bodies which accumulate in the cells of the salivary gland. The experiment has been rounded out to complete success in the case of the estivo-autumnal parasite. Three mosquitoes which ten days before had been allowed to bite an individual infected with estivo-autumnal malaria were placed upon a non-infected individual, the result being the development of a characteristic estivo-autumnal malaria. The three mosquitoes were killed after biting this individual, and full-grown bodies were found in the walls of the stomach, while the cells of the salivary gland were filled with the small spindle-shaped "sporozooids."

The result of these observations has then been a positive demonstration of one method by which malarial infection may occur, namely, through the bites of mosquitoes.

Is this the only method? This is a question which, as yet, we cannot answer. From analogy with similar diseases, and from a careful study of the etiological conditions of malaria, the Italian observers are strongly inclined to believe that this is the case.

Are we to assume that the mosquito can acquire the parasite only by biting infected human beings? Is it not probable that there are other forms in which the parasite exists outside of the human body? These are questions which remain to be answered.

It should be said that certain of the capsule-like bodies in the stomach wall

of the mosquito do not give rise to these small spindle-shaped structures, but contain a smaller number of large brown spores (?), which there is some reason to believe may be more resistant forms of the parasite and may possibly be transferred in some way to the mosquito larvae.

An interesting point in connection with these discoveries is that it has completely supported Laveran in his original view that the flagellation of the malarial parasite was an important vital process, and not, as others had supposed, degenerative in nature. The first important observations tending to support this view were, as is well known, made by MacCallum two years ago. MacCallum showed that in certain parasites of birds, as well as in the human being, the free flagella penetrate other full-grown forms of the parasite in such a manner that there can be little doubt that the process is one of fecundation. In the birds' parasite in which this process was first studied, the fecundated form changed into an active "*pseudo-vermicule*," described by Danilevsky. This "*pseudo-vermicule*" has a sharp point and a steady forward motion, as observed under the field of the microscope, which enables it to penetrate into and destroy almost any object in its way. As soon as Ross discovered the pigmented bodies in the stomach wall of the mosquito he assumed that the parasite gained entrance into the walls as a "*pseudo-vermicule*," the result of fecundation, as described by MacCallum. The discovery of MacCallum, then, seems to fill the last link in the chain, inasmuch as it will be remembered that both Ross and the Italian observers insist that the presence in the blood of forms capable of flagellation is necessary to the development of the pigmented structures in the stomach wall.

In connection with this work a few remarks concerning the observations of Professor Koch, which have been appearing during the last year, may not be out of place. Both in the reports of his studies in Africa and in a recent communication in the *Deutsche Medicinische Wochenschrift*, in which he describes his studies in Italy, Koch has detailed obser-

vations confirming much that has been done by French, Italian, American and Russian and German observers. The publications have unfortunately appeared in such a form as to give most readers the impression that the observations are original discoveries. They have been so regarded in many non-medical, and in some, particularly German, medical publications. It is but fair to say that Professor Koch's observations, while entitled to all the attention which is, of course, due to their distinguished author, are solely confirmatory in nature; Koch has not as yet made a single original observation in this field. Everything which he has described has been previously worked out and reported by others, and it is unfortunate, as Dr. Nuttall has elsewhere observed, that his publication should have taken such a form.

A STUDY OF THE HUMAN GAIT.

By E. H. Bradford, M.D.

Boston.

ABSTRACT OF PAPER READ AT THE CENTENNIAL MEETING OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND, APRIL 25-29, 1899.

HUMAN gait is ordinarily divided into the walk and the run, distinction between the two being based on the fact that in the former one foot is always on the ground, while in the latter both feet may be in the air at the same time. The walk, however, can be subdivided according to the force used in propelling the trunk forward and the manner in which that force is used.

The varieties are as follows: First, the upright gait, which is commonly seen in adults walking on an even surface. It is characterized by the erect position of the trunk and the firm planting of the heel of the forward leg upon the ground. The trunk is pulled forward by the muscular action of the glutei and the hamstring muscles, and this is aided by the push of the rear leg. This gait is seen in all cities and is common among shoe-wearing people. It is exaggerated in people the muscles of whose feet are weakened by shoes and by a life of leisure. In this gait the

front of the forward foot is used but little and of the rear foot only at the end of the stride. The gait, consequently, taxes the muscles of the soles of the feet governing the action of the toes and the front of the feet but slightly. This gait can be easily recognized by the erect position of the trunk, with the head well behind the striking point of the front heel. In exaggerated cases there is added to this an exaggerated toeing out of the feet and an unusual angle of the foot formed with the plane of the ground as the heel strikes the ground. The erect gait is common in corpulent persons and in persons walking down an incline.

The second form of gait is usually seen in barefooted individuals, and is characterized by the utilization of the weight of the body falling forward as a means of propulsion. The body is inclined forward from a stationary point, and would fall forward if this were not checked by the forward leg thrust out to prevent the fall. The heel of the front foot may or may not strike the ground first, but if it does it is immediately followed by the whole of the sole and the toes. Ordinarily, however, the front foot catches the weight on the whole sole. The front of the foot pressing upon the ground presses the inclined body forward, and in barefooted or moccasined individuals and soft ground the pressure of the toes pulls the body forward, progression being also aided by the push of the rear foot at the end of the stride. The heel is but little used as a point by which the body is pulled forward, but the front of the foot is largely used somewhat as in animals to claw the ground. This gait is characteristic of barefooted and moccasined people. It is common in young children and is seen in persons in snow-shoeing, walking in slippery places and up a sharp ascent. The knees are usually slightly bent, and strain comes upon certain muscles of the leg not used in the other variety of gait, that is, in the muscles of the soles of the feet and the front of the thighs. Less strain comes upon the muscles of the calf. As the heel does not strike the ground with a straight limb, there is less jar on the spine, and as the body falling forward is utilized as an aid to propulsion, there

is a muscular economy in this gait. A combination of these two gaits is seen in strong and active walking, the weight of the falling body being utilized, but the stride is long, a strong push of the rear leg being used.

Variations also exist in the manner in which the feet are used at the different parts of the step and in the attitude of the trunk during walking.

These are dependent upon differences in the relative strength of the muscles brought into action in walking. An acquaintance with these variations is necessary in the recognition of the pathological varieties constituting a limp.

Historical Department.

Under direction of EUGENE F. CORDELL, M.D.,
Author of "Historical Sketch of the University
of Maryland" and Editor of the "Centennial
Volume" of the Medical and Chirurgical Faculty.

III.

THE FOUNDERS FROM THE EASTERN SHORE OF MARYLAND.

SO MUCH interest has been excited in the charter members of the Medical and Chirurgical Faculty by the recent centennial celebration and the splendid exhibit of portraits, diplomas, etc.—and I hope I may be pardoned for saying that this exhibition, in my opinion, has constituted the chief and great attraction of this occasion, drawing to McCoy Hall during the last few days thousands of our citizens of all classes and conditions*—that in continuing these historical papers I have thought that some account of our founders may at this time be more acceptable than anything else I could contribute. Our knowledge is still very meager, but I shall give what I have, hoping that the interest already excited, and possibly the publication of these papers, may add to our stock of information of them. I shall draw freely from a little

*Too much praise cannot be awarded Dr. Henry Barton Jacobs, Chairman of the Portrait Committee, for this portion of the exhibit. To his efforts chiefly we owe it. He worked incessantly day and night and wrote scores of letters all over the State.

book in manuscript by Dr. Peregrine Wroth, dated August, 1862, of which several copies were written by him for the descendants of the physicians of whom he writes. One copy of this interesting little work is in the possession of the Medical and Chirurgical Faculty.*

JAMES MOAT ANDERSON OF KENT COUNTY.

Dr. James Anderson, the first of the family in the State, emigrated from Scotland to Maryland during the first half of the last century and settled in Kent county. His youngest son, known as James Moat Anderson, Sr., to distinguish him from the third one of the name, was born in Kent county in 1752. He received a classical training at the academy in Chestertown, and then began the study of medicine under his father. He continued his studies at Philadelphia and Edinburgh. He never took a degree in medicine, but he brought from Edinburgh a certificate of merit, which was signed by all the professors of the university there, including the celebrated Cullen and the elder Monro. He practiced at Chestertown until about his sixtieth year, when he retired to his country-seat near the town, where he died on the 8th of December, 1820. Dr. Wroth thus speaks of him: "He achieved in that neighborhood (Chestertown) a reputation which few have since enjoyed. His practice was extensive and his services always in demand. He was fond of discussing his cases carefully in consultation, and it was seldom that he erred in judgment. His speech was plain and unaffected—always to the point. In his daily walk he was conscientious and eminently pious and was looked upon as a model man. His appearance was unique and striking; though small in stature and limping in gait, his dignity was never laid aside. His person was slender and arrayed in a gray-cloth, long-waisted, shad-breasted coat reaching far below the knee, with standing collar and ample pockets, olive-colored velvet breeches with silver knee-

*The brief memoirs here collected were written at the request of Dr. George C. M. Roberts, of Baltimore, one of the most devoted and active members of the Faculty, who contemplated publishing a biographical work on the charter members. What was the extent of Dr. Roberts' researches and whether he left anything in manuscript I have never learned; he never published anything to my knowledge.

buckles such as were worn by gentlemen of that time, gray home-knit stockings and low-quartered shoes, or in winter red-topped boots, a low-crowned, broad-brimmed beaver hat and a white-lawn stock, buckled behind." The last two articles of apparel were worn by the leaders of the Methodist Episcopal Church, and Dr. Anderson assumed them on account of his connection with that denomination, with which he had united in early youth.

Dr. Thacher, the New England biographer, thus speaks of him, doubtless from information obtained from some one living at or near Chestertown:* "Prompt in his decisions and drawing from a rich fund of learning and experience, he seldom failed in his diagnostic discriminations and clinical calculations. Communicative and affable to all, he never forgot the dignity of his character or what it exacted. His home was an asylum for the indigent, and such were his liberality and benevolence that though his practice was extensive and lucrative he was precluded from the accumulation of wealth. He was attached to the doctrine of the old school."

Dr. James Moat Anderson, Jr., was the oldest son of the last-named and was born at Chestertown in 1774. He received his literary education at Washington College in Chestertown, then recently founded.† His medical studies were pursued under the immediate direction of Dr. Benjamin Rush of Philadelphia, who at that day was by many considered the medical monarch of America. He attended lectures at the University of Pennsylvania, but did not receive a degree—at least I have seen his signature to a diploma of the Faculty dated 1808, and he signs simply "J. M. Anderson, Jr.," while the other four "perquisitores" (examiners) all add "M.B." or "M.D." to their names. He began practice in association with his father, and upon the retirement of the latter to his farm he succeeded to the entire business while still young. He also succeeded his father upon the board of examiners of the Faculty, the elder Anderson having resigned from the first board. Though not having the degree, he was, like almost all

the physicians of Kent at that day, called "Doctor" by courtesy. His business was select and remunerative, as he avoided extensive employment among the poorer classes. He enjoyed a high reputation for skill and knowledge of his profession. He died very suddenly of heart disease at Chestertown on the 31st of May, 1830. Dr. Wroth describes him as "of medium size, well formed, of comely and graceful person, lordly in his carriage and general deportment, exceedingly careful in his dress, which was of the most costly materials, fashionably cut. On his forehead was stamped in legible characters, '*Odi profanum vulgus et arceo*'" ('I hate common people and keep them at a distance'). With those whom he considered equals he was affable and sociable. To all he showed himself to be the refined, well-bred gentleman. He was a great reader, and although spending much time with the lighter literature, kept himself nevertheless posted in the progress of medical science. In his genial moods his conversation was seasoned with much wit and humor, and, having an inexhaustible fund of anecdote, he was the life of every circle into which he was thrown. He was quick at repartee and enjoyed the society of kindred spirits so keenly that I have seen him almost fall from his chair in convulsions of laughter. He was very popular as a boon companion, and was admired by his patients as second to none as a judicious physician. After visiting his town patients one evening he returned home apparently in his usual health. There had been no suspicion of heart disease. He felt indisposed, and lay down in his bed. Mrs. Anderson was with him. He felt his wrist, and perceiving no pulsation there he said, 'It is all over,' and expired."

I have purposely left out the suffix "Jr." in the designation of the founder, because, although it is given with the name in the list embodied in the charter, I am sure it is misleading. I am satisfied that the founder was the second of the three Drs. Anderson above mentioned. That individual was then in his prime, forty-seven, and his high standing and influence on the Eastern Shore pointed him

*Phila. Journ. Med. and Phys. Sci., Vol. II, 1821.

†It was founded 1782. James Anderson was one of the first Board of Trustees or Visitors.

*Odes of Horace. Lib. III, I.

out as especially eligible for the responsible and eminent position of founder of the Faculty.

It is not likely that his son, who was but twenty-five, would be selected in preference to him. Moreover, in the notice of the first meeting contained in the *American* of June 11, 1799, "Dr. James Anderson, Sr., Kent county," is named as one of the board of examiners from the Eastern Shore. That notice was doubtless given to the paper by the secretary, Dr. Ashton Alexander, and can, therefore, be considered as official, although not signed formally by him. Dr. Wroth also states that he was a member of the first examining board, as I have already stated. It may be that the second Dr. Anderson used the term "Jr." to distinguish himself from his father, the emigrant. There is against this, however, the fact that the first Dr. Anderson does not appear to have had a middle name; none is, at any rate, given in speaking of him. This is not absolutely convincing, as there was great carelessness about names then, and it was not uncommon to omit a middle name or initial in designating anyone. The first Anderson may be left out of consideration in deciding the question as to the identity of the founder, when we consider his probable age in 1799, if even living, which does not seem to have been the case. Dr. Anderson 2d was the youngest son of the emigrant, and was born in 1752. Taking all these things into consideration, the carelessness characterizing the times,* the possibility of mistake in copying and the possibility of putting a "Jr." where there should have been a "Sr.," I think we may be pretty certain that the founder was the second Dr. Anderson. It is worth mentioning that no members were elected at the first meeting in 1799; there was, in fact, some question among the founders as to whether the charter conferred the right to add to the membership, and legal advice was obtained on this point before anything was done, which postponed the election of new members to the second meeting in 1801. I find the name of "James Anderson, member of American

Philosophical Society" (probably No. 1), and "James M. Anderson of Kent county, Maryland, president of a meeting for the abolition of slavery, held at Chestertown, 1792" (probably No. 2). Both of these references are from Quinan's manuscript notes. One can form an idea from the above that the writing of even a local history is by no means an easy thing, and that difficulties are met with which it is sometimes impossible to clear up. The same uncertainty exists regarding the numerous Browns, Gustavus and Gustavus R., etc., of the Western Shore.

Correspondence.

THOMSONIAN MEDICINE.

Correspondence Strictly Confidential.
[Established 1880.]

FREDERICK G. HOENER, M.D.

SOUTHERN PHYSIO-MEDICAL OFFICE,
Chronic and Complicated Diseases
a Specialty.

112 SOUTH BROADWAY.

Office Hours: { 9 a. m. to 1 p. m. Sundays: { 10 a. m. to 3 p. m.
 { 3 p. m. " 10 " { 7 p. m. " 10 "

BALTIMORE, MD., May 3, 1899.

Editor of the Maryland Medical Journal:

Dear Sir—In your "Souvenir April Number" I took notice, on pages 274 and 275, where Dr. Quinan gives an account of "Thomsonians or Botanic Physicians," etc. This is, to my estimation, deliberated falsehood. The utterances of Dr. Quinan shows that he is not in favor of medical progress and is only thereby stagnating the advancement of a true scientific practice of medicine.

The physician that starts out with the idea of using simple vegetable remedies in the treatment of disease will become the most successful, because it is based upon common-sense principles. These remedies are scattered broadcast over the whole universe. If they were put up in fine packages and sent from Germany or France and sold at a high price very likely many people would use them.

The German and French chemists and physicians put up antitoxine and many other preparations too long to mention, *et id omne genus*, for the credulity of the profession and our people to swallow,

*An example of which is seen in the charter in the name "John Hartor" for "John Huston," a founder.

prescribed by those who have never practiced medicine in this country. What do they know about the constitution, habits, manners and customs of the American people? It is contrary to the dictates of common sense to suppose that a poison, either animal, vegetable or mineral, can be a medicine; it is a contradiction of terms. They may provoke an action in the system for the time being at the expense of the system which may bring about bad results if continued. How much better to give a medicine that will assist nature to bring about a healthy action. Every practitioner of medicine can readily see the difference between provoking and assisting nature rid the system of disease. Brown and Thomson paved the way to establish a true scientific medicine in the future. They had committed some errors, but not so many as have been and are now committed by other schools of medicine.

The vegetable kingdom, with its abundant supply of non-poisonous "sanitive medications," either as food or medicines, is the only one that possesses the ingredients to assist nature, and a physician is an imitator or an agent to build up the weakness and purify the system at the same time from morbid matter that cannot be extirpated by any other means than by the vegetable substances. If the vegetable kingdom were not in existence all animal life would be extinct. This any sound, intelligent mind must admit, and as we are nearing the end of the nineteenth century the people in general think for themselves, and they closely observe the errors that are committed the most on either side of any school of medicine; they will depreciate, and all humbug, hypocrisy or slinging of mud will not stop the tide of public opinion.

I, for one, feel sorry for Dr. Quinan that he should so wrongfully and wilfully attack the good and true characters of my predecessors, who enlightened the world in building up a strong and healthy race, but not to poison the blood and weaken their constitutions. I hope that some day Dr. Quinan and his followers will throw all prejudice and obstruction aside and give honor to whom honor is

due and be more at ease in advocating a truer system of medicine as they do now.

Very truly yours,

FREDERICK G. HOENER, M.D.

Society Reports.

THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY.

MEETING HELD MONDAY, MAY 8, 1899.

DR. BLOODGOOD: "Report of Surgical Cases."

Case I. A man about 56 years of age entered the hospital two years ago with tuberculosis of the shoulder joint. The joint was incised and there was found tuberculosis of the synovial membrane and a tuberculous area in the head of the humerus. The result in healing was good and the functional use of the arm was preserved, although on account of the extensive destruction of bone the head, neck and a large part of the shaft of the bone had to be taken away. The patient remained well until four months before coming to the hospital, and first noticed that he limped a little on the left leg and had pain in the left hip. On examination it was found that the left limb was pretty well fixed at the hip joint, and any attempt at flexion, extension or other movement produced pain. The limb was held a little flexed and in slight abduction. There had been no disease to produce destruction of the head and neck of the femur, so there was no shortening. When the patient lay on his back one could see a definite fullness below Poupart's ligament on the left leg, chiefly to the outer side beneath the sartorius muscle. This swelling had pushed the vessels a little to the median side and slightly forward. It was difficult to tell whether there was fluctuation, but there was undoubtedly some fluid beneath the muscles. With the history of tuberculosis of the shoulder, it was thought probable that this was an early stage of tuberculosis of the hip. Tuberculin was given twice, but there was no reaction.

It was decided to explore the left hip, and the incision on the outer side of the anterior surface of the thigh (advocated a number of years ago by Mr. Barker of London) was made. By making an ex-

ploration there, going between the tensor vaginae femoris and the rectus muscle, one finds that he can expose the capsule of the hip joint without dividing any muscles. In this case, as soon as the separation between the muscles was made, a swelling was found, which afterwards proved to be the capsule of the joint, which, upon incision, was found to contain fluid which was seropurulent. In the tissues outside the capsule there was no evidence of infiltration, but inside the capsule was found the ordinary picture of tuberculous granulations seen in tuberculous synovitis. The cartilage of the head of the femur was not eroded, but on examining the neck of the femur a small cavity was found, into which one could introduce the finger, the area around it being hemorrhagic. This tuberculous area was chiseled out, the head of the bone and trochanter chiseled into, but no other areas of tuberculosis were found. Having removed all the tuberculous bone that could be found, the granulation tissue of the capsule was curetted away, dependence being placed on this method rather than to attempt the removal of the capsule of the hip joint, which is a prolonged and difficult operation. For six weeks the capsule was irrigated and iodoform injected into it. At the end of this time the wound was allowed to close, and at the end of eight or ten weeks the patient was walking about on crutches, with no pain and no restriction of motion. He is now (some weeks after operation) apparently well.

This, of course, represents an early exploration in tuberculosis of the hip joint, and so far presents as perfect a result as could be expected in any case.

Case II. The patient is one at present in the wards of the Johns Hopkins Hospital, having been admitted seven years ago with tuberculosis of the hip, but had been under observation two years previous to her admission. During the past nine years she has spent much of the time in bed, in extension splints or walking about with the hip in plaster, and during the past year she has been using crutches. A year and a-half ago an abscess formed, broke, and soon healed. As she had been under treatment for nine years and still

had pain, with an ankylosed hip, the joint was explored in order to demonstrate whether the disease was entirely cured, and if any disease remained, to remove it. An interesting picture was found, one that very few surgeons have an opportunity to see. The same incision was made as in the first case, and as soon as the fascia lata was cut through a healed tuberculous abscess was opened into. A small mass was exposed, perhaps 1 cm. in diameter, also like the center of a gumma, which was friable and did not entirely fill the cavity, the wall of which was a perfectly smooth membrane, there being no granulation tissue. From this cavity a little mass of cheesy material was easily excised. There was no fluid, and the tissues outside were simply infiltrated with new connective tissue. The normal capsule of the femur was not present, but over the neck, head and trochanter was a great deal of scar tissue. This was cut away, but on pushing back the periosteum no evidence was found of tuberculosis in the bone, although an opening was chiseled into it. The marrow was very fatty and congested. There was no acetabular cavity, but the head of the femur was surrounded by quite a growth of new bone. The scar tissue was excised, together with the abscess, leaving a blood clot, with the hope that the new tissue would be better than the old. The wound has healed, but the result is as yet uncertain.

Dr. Bloodgood said he reported these two cases to illustrate that the first, after a period of two months from the time of operation, was walking about, while the other, after nine years' treatment by rest, has an ankylosed joint. The question arises whether it is not best, in young children especially, to explore the hip joint early. We can explore the cavity as well as the bone, and as we know that tuberculosis of the bones begins in small areas, these can be chiseled away and the bone irrigated or injected for a number of weeks if necessary, and by this procedure we may shorten the time required for the cure of tuberculosis of the hip. We know that by rest cases do get well in time. Those that have had the disease for years may get well, but usually have some ankylosis, and during the years of

treatment the leg has to be fixed in some sort of splint, and the muscles are not used. We know the effect of non-use of muscles upon them and upon the bones.

The advantage, then in early exploration and removal of the disease areas is that it shortens the time of rest and the patients are able to begin the use of the leg at an earlier period. There is one other important point in the early exploration, and that is, now, and then we find an abscess of the bone and drain it before it perforates the capsule and injures other parts of the joint.

Dr. Platt said this subject was one of extreme interest to him. It had always seemed that if it were possible to explore and if necessary operate upon these cases we should have made an important advance. The first view of the Germans was that we should resect and remove the head of the bone. They thought there was no way of getting out the disease and draining the cavity properly except by removing the head of the bone, which acts like a stopper in a bottle to block up the cavity. A great many cases, he is sure, originate outside the joint, in the great trochanter. If we could say what cases would get well by the rest treatment, we would have no difficulty in deciding when to operate, but that is a difficult point to determine. Of course, the great majority of cases of hip-joint disease do get well with proper treatment, rest in bed and mobilization. The traction splint, he thinks, is a delusion, and believes we would get just as good results from the Thomas splints which the English are so fond of.

Dr. Platt says where you have an abscess, and especially if there is a sinus, it would seem proper to lay them freely open and clean them out. It is surprising in a case of hip-joint disease to see how small may be the amount of trouble in the bone which causes such an immense amount of septic poisoning. He thinks the ill-effects in most cases of tuberculosis of the soft parts have come from a focus of tuberculosis of the bone, and if we can get rid of this, lay the bone open, clean it out and immobilize the limb, the disease becomes quiescent and

does no further harm, but causes some partial ankylosis.

He thinks surgeons are more and more inclined to the view that the trouble in hip-joint diseases is due largely to the resultant tuberculosis of the soft parts, and only in exceptional cases to the tuberculosis of the bone itself.

Dr. Kelly: "Report of Gynecological Cases."

Case I. Extensive Destruction of the Sphincter. The patient was an old syphilitic with extensive ulceration of the bowel, which she had had for a number of years, and for which she had had a number of operations. The diseased area could be distinctly felt through the vagina as a rigid fibrous cord extending well up back of the cervix, and in some of the operations the sphincter had been destroyed anteriorly, leaving a boat-shaped scar.

On the 23d of last March *Dr. Kelly* performed the following operation: He divided the septum freely with a pair of scissors, cut across the sphincter and turned it over as a flap, making a U-shaped incision, with its convexity forward, then followed up the bowel, catching it with forceps and pulling it down and dissecting it out on all sides with scissors. He tied a great many small vessels, dissected out the levator ani, opened the peritoneum, and found at the point opposite the middle of the cervix that the lumen of the bowel became normal. At this point he cut the bowel, brought it down and attached the posterior end just behind the sphincter; then, by a somewhat complicated plan of suturing, he attached the bowel anteriorly and at the sides to restore the sphincter. The patient made a perfect recovery and now has entire control over the function of the bowel.

Case II. Carcinoma Uteri. *Dr. Kelly* said this patient had probably the most advanced carcinoma of the uterus he had operated upon satisfactorily since he had been at work at the Johns Hopkins Hospital. The lower part of the uterus was destroyed and the disease extended interiorly so far that there was some doubt about the involvement of the floor of the bladder. He first introduced bougies

into each ureter, so as to have them under observation all the time. This, Dr. Kelly thinks, is a *sine qua non* to success in all such operations, for we can at any moment see just exactly where the ureters are. He then made an incision in the vault of the vagina and began by freeing the bladder from the vagina and separating it from the uterus, and catching the uterus at the fundus, he pulled it down through the opening in the vaginal wall. He then began tying off the vessels of the broad ligament in the upper part, split the uterus in two, which made it more movable, and was able to turn the two portions down into the vagina, and so get at it more readily. He first removed the easiest side, taking care to get as far as possible from the uterus and to avoid the ureter, which was constantly in view; he then attacked the difficult side, and when he reached the base of the broad ligament was able to appreciate very well the risks one experiences when the ureter is not catheterized. The diseased portion of the ureter was amputated, the bladder incised and the ureter stitched to it. The patient has done very well ever since, and there is every reason to believe that she will make a good recovery.

Case III. Excessive Growth of Fat. A patient, thirty years of age, entered the hospital the other day because of an enormous development of fat in the body. She had a pendulous abdomen, her weight being 285 pounds, and the mass removed weighing 7450 grammes.

Dr. Welch wished to say a few words about the question of metastases in cancer of the uterus. It is a matter of interest that the prognosis is relatively favorable after such operation, and this is, of course, due to the late period at which metastases are prone to appear. There are two forms of cancer of the uterus—the flat celled of the surface, and the malignant adenoma of the body. The latter originates, of course, in the mucous membrane, extends down slowly into the wall of the uterus, and is a significant fact that the metastases occur generally quite late. It is as if the wall of the uterus was a sort of case and prevented the ready entrance of the cells into the lymphatic or blood current. The flat-celled epithelioma does

not form secondary deposits in the lymphatic glands as readily as most cancers do, and this is true in general of flat-celled epithelioma.

Referring to Dr. Kelly's third case, Dr. Welch said it is well known that you can have localized growths of fat, and their relationship to genuine tumors has been very much discussed. Such diffuse masses not circumscribed occur not only in the abdomen, but on the back, sometimes around the buttocks, and he recalled one very remarkable instance which he saw in New York where it involved one thigh only.

Dr. Welch: "Hemorrhagic Infarction of the Lung."

THE CLINICAL SOCIETY OF MARYLAND.

MEETING HELD FRIDAY, MAY 5, 1899.

IN the absence of the president the meeting was called to order by Dr. A. D. McConachie.

Drs. Jackson Piper and W. E. Miller were elected to membership.

Dr. Julius Friedenwald: "A Case of Dilatation of the Stomach, due to Latent Ulcer at the Pylorus; Operation by Halsted; Exhibition of Patient."

The history of the case was as follows: Man, aged thirty-nine years, with good family history, presented himself for treatment April 28, 1898. The attack began with intense pains in the abdomen in the region of the stomach and in the back, the pains being especially severe at bedtime and accompanied with nausea and vomiting, the nausea and pain being relieved by vomiting. Especially noticeable was the vomiting of very large quantities of very acid food remains, always more than could be accounted for by the last meal. On examination the patient was found to be a badly-nourished man, with flabby muscles and pale mucous membranes; heart and lungs normal; tongue furred.

On inspection the abdomen was found to be distended with gas in the epigastric region, peristaltic and antiperistaltic waves traversing this region. No tumor could be palpated, nor could the liver or spleen be palpated. By producing the "splashing sound" the greater curvature

of the stomach was found to reach two fingers' breadth below the umbilicus, which was also the case when the stomach was inflated with air. The gastric contents when removed after an Ewald test-breakfast were very large in quantity, of the well-known three-layered variety, and frequently contained food particles eaten the day before; the odor is that of bad beer, and occasionally one could detect the odor of sulphureted hydrogen. The gastric contents always showed a high total acidity ranging between 100 and 70, with free hydrochloric ranging from 0.323 per cent. to 0.137 per cent. Microscopically, large numbers of sarcinae and yeast spores were frequently found. The urine was highly concentrated and scanty, of a specific gravity of 1028 and with great excess of urates; does not contain albumen, sugar or indican.

Diagnosis of dilatation of the stomach, due to a non-malignant stricture of the pylorus, probably the result of a latent ulcer, was made. The patient was placed upon a strict diet, taught to wash out his stomach, and given powders of magnesia or magnesia with chalk and sodium bicarbonate, in addition to which strychnia was also ordered. From the beginning of the treatment, April 28, 1898, to August the improvement, though slow, was marked. After this time the motor disturbance became more marked, although the stomach did not enlarge, but the vomiting, pain, pressure and nausea began anew, and in order to have the least comfort the patient was required to practice lavage twice daily. A pyloro-plastic operation was decided upon and was performed by Dr. Halsted. The patient reacted thoroughly from the operation and had no fever during any period of his convalescence. He was fed per rectum for five days and then given liquid food per os. A few days after leaving the hospital the patient went to his regular work and has been well ever since.

Dr. Friedenwald said this case fully illustrates the fact that in cases of non-malignant strictures of the pylorus operation is essential in order to completely restore the patient to health; that while proper dieting and lavage may relieve the symptoms for a time, this effect is but transi-

tory, and sooner or later obstructive symptoms will again manifest themselves, and, in order to have the best results, the operation should be performed sufficiently early, before the general health of the patient has failed too far or before the pathological changes in the stomach have gone on so far as to prevent the stomach from regaining its normal tone.

Dr. Stokes said he was reminded of a case in which he performed the autopsy which he thought showed the importance of early surgical interference in carcinoma of the pylorus. The patient had been attended for some time by well-known physicians, and within a week of his death they made out a dilated stomach. An operation had been thought of, but they did not think the patient would die so soon. At the autopsy the pylorus was found to be practically closed and the stomach very much dilated. The simple carcinoma of the pylorus extended into the muscular coat of the stomach and completely occluded the pyloric orifice. There was no extensive growth into the stomach wall beyond the pylorus, and Dr. Stokes said it seemed to him a typical condition which might have been relieved by a surgical operation. He wished to emphasize the fact that often an exploratory operation might suggest the necessity of a further operation which might save the patient's life.

Dr. Jose L. Hirsch gave the "Report of Three Cases of Epidemic Cerebro-Spinal Meningitis, with Demonstration of the Diplococcus Intracellularis Meningitidis," in which he referred particularly to the value of lumbar puncture, both from diagnostic and therapeutic standpoint. The importance of this step was also emphasized by Dr. Stokes.

ASSOCIATION OF AMERICAN PHYSICIANS.

FOURTEENTH ANNUAL SESSION, HELD AT WASHINGTON, D. C., MAY 2, 3 AND 4, 1899.

WEDNESDAY, MAY 3—SECOND DAY.

Dr. W. W. Johnston of Washington read a paper on "The Continued Fever of Epidemic Influenza." The onset of fever is sudden in all cases of influenza. Sometimes a short, acute, catarrhal stage is followed by prolonged fever, but more fre-

quently the attack is very mild in the beginning, but progressive weakness and increasing fever finally force the patient to seek medical aid. As a rule, the evening temperatures are ascending from two to five days. Defervescence is gradual, resembling typhoid fever, and the normal point is reached at different dates. The common characteristic of the latter stages of influenza fever is the long-continued minor oscillations and very delayed disappearance of the evening rise long after patients have resumed a more active life. The recognition of the nature of this fever is sometimes difficult, and it may be taken for enteric fever, or even for acute tuberculosis.

Dr. Victor C. Vaughan of Ann Arbor read a paper on "Typhoid Fever Among the American Soldiers in the Recent War With Spain." He said: In August, 1898, Dr. Sternberg appointed a board consisting of Maj. Walter Reed, U. S. A., Maj. E. O. Shakespeare, U. S. V., and myself to study the causes and the spread of typhoid fever among the troops in the various corps within the United States. The members of this board have been and still are engaged in this investigation. The work is not completed, but the board feels justified in formulating certain conclusions. We have visited all the large camps in the United States, making direct personal inspections, studying the water supply, the quality and quantity of the food and its method of preparation, the nature of the soil of the camp, the space allowed regiments, the arrangement and size of the tents and number occupying each one, the location of sinks with reference to the mess tent, the disposition of fecal matter, etc. Medical and other officers were called upon for testimony. Then followed a study of the records in the Surgeon-General's office.

The first striking point appeared in the first day's work at Camp Alger, and consisted in the lack of scientific diagnosis of typhoid fever; most of the febrile cases were found to be diagnosed as malaria. At once competent men were asked for and furnished promptly by Dr. Sternberg to go to the various camps and make scientific examinations of the blood and apply the Widal test in febrile cases. As

a result of these careful examinations, it can be stated that malaria was a very rare disease among the troops that remained in the United States, not one case being found at Camp Alger, for instance, and only one at Chickamauga. Our full report will contain in detail the evidence and reasons for saying that practically all the protracted febrile cases were typhoid. Not only was typhoid diagnosed as malarial, but it was covered up by other names. For instance, in one regiment the death-rate from indigestion amounted to 15 per cent. of all the cases, and in another nearly all deaths were attributed to dengue.

The origin of typhoid in the large encampments is easily determined. So widespread is typhoid fever in this country that in assembling a regiment of volunteers the probabilities are that one or more men will be found to be infected with the disease, and about 90 per cent. of the volunteer regiments that went to Chickamauga were infected when they reached that place. How did it spread among the troops? The evidence concerning the possibility of water infection is for the most part negative. The most potent factor at most of the camps was camp pollution with fecal matter. The epidemic was not due in any respect to the sending of Northern men to Southern camps. In most of the camps fecal matter was deposited in pits, which were open, and flies swarmed over it, and then, of course, walked over the food at the mess tents. In many regiments fecal matter was deposited about the camp on the ground, and there were pieces of woodland near Chickamauga Park through which one could not walk without soiling his shoes. In many regiments paper soiled with fecal matter was blown about the camp. In fact, there was no adequate provision for disinfection of stools and prevention of infection.

A table will be appended to show to what extent typhoid prevailed throughout the country. The death-rate is difficult to determine, but seems to be somewhere between 4 and 7 per cent., perhaps closer to the latter figure.

Dr. Sternberg: It is certainly discouraging that after the lessons of the civil

war we should have had a repetition of camp infection by a disease that we recognize as due to filth. I had hoped for better things; that the profession in general would more fully appreciate the dangers, and I issued a sanitary circular describing the means of avoiding such an infection. The line officers were many of them inclined to consider all talk about cleaning the camp, about flies carrying infection, etc., as a fad of the doctors, and would not recognize danger until the epidemic had occurred. I am afraid that the doctors throughout the country do not pay as much attention as they should to the sterilization of the excretions from typhoid patients, and these are the doctors that made up our regimental surgeons. Typhoid invaded practically all the camps, even those in Northern States, where the regiments never left the home camp. I can only hope that the results of this war may be impressed upon the profession, and that we may devise some way of avoiding similar disasters in the future.

Dr. Kinnicutt: It seems to me that Dr. Vaughan has shown in a striking way the probable cause of typhoid in the late war, and unless medical officers have sufficient knowledge and power to enforce proper sanitary precautions in the army, I do not see how we can hope for anything better in the future. I had an invitation to inspect the sanitary conditions at Camp Montauk, and I found that disinfection of the excretions from typhoid cases was exceedingly inefficient. At this camp the natural topography made the conditions extremely unfavorable, and I saw the camp cooks washing dishes at some of the numerous stagnant pools that abound in that neighborhood. I confess that camp sanitation is a difficult problem, but I believe that greater knowledge on the part of our medical officers and greater power given them would bring about better results.

Dr. Peabody: It seems to me this paper constitutes the most terrible indictment I have yet heard upon the general efficiency of the army surgeon, and it would seem quite in line with future progress to use it as a tract for distribution to the profession.

Dr. Sternberg: In reference to the medical department of the army I would like to say that we had an insufficient number of medical officers even for the small army of peace times, and when the call for such a large number of volunteers came, with the demand that they be put into the field immediately and thoroughly equipped, the medical force could not expand to meet the emergency properly. The surgeons for the volunteer regiments were appointed by the governors of their respective States.

Dr. Jacobi: I do not know what the rights or duties of the Surgeon-General are, but he should certainly not be compelled to accept all the rubbish that might be sent him by an ignorant governor. If he is compelled to accept such appointments, it is about time something should be done to abolish such a practice.

Dr. Sternberg: I do not mean to say that these men who went with the regiments were below the average of the profession. Of course, the best men with large practices do not offer themselves for such positions, but even if they did, many of them would have much to learn about camp sanitation, a subject to which medical schools pay little or no attention.

Dr. Dock: I brought with me some temperature charts for your inspection which were taken in these camps. A large number of the volunteer surgeons went to camp with the idea that they would have a large number of cases of malaria, and they carried large stores of quinine. Some of them instructed the men to begin dosing themselves with this drug on the first appearance of illness.

Dr. Cohen: I want to say a word for the volunteer regimental surgeon. It is a matter of record that Colonel Porter's regiment from Pennsylvania had almost no fever, and but two deaths from any cause. This was due not only to the efficiency of the surgeons, but also to the efficiency of the line officers, who thoroughly carried out sanitary measures suggested by the surgeons. I do not believe the responsibility for this awful disaster is upon the profession to the extent that the paper would imply, for I think with Dr. Sternberg, that many of the line officers are responsible in that they con-

sidered all sanitary suggestions as medical fads.

Dr. Vaughan: I did not mean to be hard upon the regimental surgeon, but I think we should all recognize the fact that the medical officer is powerless unless the line officer will follow his direction. I honor the graduates from West Point and Leavenworth, but I consider it a crime that the line officers of the United States Army have no instructions upon sanitary matters at either of these places.

Medical Progress.

SURGICAL HINTS.—In these days of absolute cleanliness in surgical operations the following hints from the *International Journal of Surgery* are well worth considering:

Never allow a room to be swept or dusted just before an operation. Cover everything with wet sheets, if necessary, so as to prevent the raising of dust.

When you have blood on your hands, first wash them in pure water. Using soap at first is a mistake, as soapy water does not dissolve blood rapidly. Clear water and a nail-brush should come first, soap next.

In all amputations, remember that the loose muscles retract more than those which are attached to the bone. Hence it is better to sever the loose muscles first and the attached ones next, so that the ends may be of equal lengths.

If you believe that the operation has been a clean one, leave the wound alone, if not an infected one. The best surgeons usually apply but one dressing, the first. When this is removed the stitches are taken out, and the wound only needs a clean covering for a few days.

Before giving ether to patients suffering from catarrh of the nasal passages, wash these out with an alkaline solution. This will, by cleaning out the secretions, allow much easier breathing, and hence increase the facility with which anesthesia can be induced.

Scalp wounds should always be stitched if of any size. But always remove the stitches very early, otherwise they may act as setons and lead to suppuration,

which, if it reaches the loose layer under the aponeurosis, is likely to be serious. These wounds only gape if the scalp muscle or its aponeurosis is incised, and a very few stitches are needed.

In cases of felon, find out as soon as possible whether the bone is attacked. Should the terminal phalanx become loose, amputation will nearly always give the most useful finger, especially to workmen. The amputation, however, is best delayed until the septic process is overcome, or else the flaps will probably die, and the time needed for healing by granulation will be greater than that taken up in previous antiseptic treatment.

* * *

THE ABSORPTION OF MEDICINES.—In an article by Moritz, referred to in *Gaillard's Medical Journal*, the point is taken that medicines are differently affected and absorbed according as the stomach contains food, water or is entirely empty. Such substances as salol or keratin have been used as a coating to prevent action on the pill by the gastric juice and to allow the medicament to reach the intestinal tract intact. Moritz concludes from his experiments that water and neutral solutions leave the stomach most quickly, while water mixed with food passes out of the stomach more slowly. In this way he says that alcohol with food passes into the intestines more slowly than without food, and it is not a matter of rapidity of absorption, but of rapidity of passing on.

Therefore he concludes that drugs leave the stomach and are more quickly absorbed when given with plain water, less rapidly with soup or milk and more slowly still after a full meal. Irritation of the stomach by drugs is thus avoided.

* * *

THE TREATMENT OF FAVUS.—In the *Therapeutic Gazette* the treatment of favus is considered by Peterson, who says that after first softening the crust of favus by means of a 1 per cent. carbollated vaseline ointment and washing it away by soap and water, he paints the diseased area with tincture of iodine. It is not necessary to remove the hair.

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BALTIMORE, MAY 27, 1899.

THE epidemic of medical meetings at the present time almost leads one to believe that a little instruction in writing and reading some of the papers presented would add greatly to the charm of these valuable contributions. In regard to carelessness in writing, the following quotation from the *New York Medical Journal* sets forth very clearly some of the troubles of the editorial chair:

"It not infrequently happens that we receive letters the nature of which suggests that they are intended for publication, but which we are obliged to ignore because the writers, either from ignorance of, or carelessness as to, editorial requirements do not conform thereto, and consequently the publication of their letters would entail upon us an amount of additional labor which we do not feel disposed to undertake. As instances of such defects, we may mention the writing upon both sides of the page, which entails considerable additional trouble on either editor or printer; the habit of using abbreviations, which we distinctly object to as leading to ambiguity, and the omission of small words, such as pronouns,

etc., from sentences, thus rendering them incomplete. Brevity, it is true, is the soul of wit, but it should be exercised in the condensation of thought, and not in the omission of small words which are necessary to the grammatical construction of a sentence. These items have to be corrected in the editorial office, and much unnecessary labor is thereby thrown on the editor; and, further, if the letter, as not infrequently happens, is closely written on a small sheet of note paper, it is often impossible to make such corrections legibly without rewriting the entire letter. We trust our readers will bear this in mind."

To present a subject to a meeting is not an easy task. Many good subjects are marred by a poor delivery and an overweight of matter. At the late meeting of the Association of American Physicians at Washington the best ideas in some of the papers read were so buried in words that it took the utmost attention to gather what was wanted. One thing unnecessary in the reading of a paper is the relating of a string of cases much alike and which add nothing but length to the paper. The discussions are usually the best part of these meetings. The executive committees of these several societies should see to it that papers are kept within limits.

* * *

THE last number of the *Bulletin of the American Academy of Medicine* contains some very interesting statistics on **Baltimore Medical Schools.** medical instruction in the United States, and it shows that Baltimore has eight medical schools, seven regular and one homeopathic. In these schools during the session of 1897-1898 there were 305 instructors, 1316 students and 325 graduates. All demand a course of four years except the Maryland Medical College, but the Baltimore University will not enforce the four-year course until after 1900. The length of the courses is from six to eight months, the Johns Hopkins Medical School and the Maryland Medical College giving eight months, while the others have shorter terms. The values of the plants run from the Maryland Medical College, valued at \$25,000, to the University of Maryland, valued at \$250,000. In 1898 the Baltimore Medical College earned \$5000, the Baltimore University \$3000, the Maryland University \$500, the Homeopathic College nothing, and the Woman's Medical College over \$1500.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending May 20, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	..	..
Pneumonia.....	..	13
Phthisis Pulmonalis.....	..	16
Measles.....	20	..
Whooping Cough.....	..	..
Pseudo-Membranous Croup and Diphtheria. }	..	..
Mumps.....	1	..
Scarlet Fever.....	11	2
Varioloid.....	..	..
Varicella.....	..	..
Typhoid Fever.....	2	..
La Grippe.....	..	..

Dr. Nathan Herman has removed to 1708 Madison avenue.

Russell Sage has given \$50,000 to the Woman's Hospital of New York.

Dr. Joseph W. Holland has succeeded Dr. J. C. Clark as assistant at "Spring Grove."

The Anne Arundel County Medical Association held its meeting in Annapolis last week.

Mr. J. P. Morgan has given the promised \$1,000,000 to his New York Lying-In Hospital.

Dr. Wm. H. McEnvoe of New York, an authority in materia medica and therapeutics, died suddenly last week.

Dr. L. F. Barker will succeed Dr. Simon F. Flexner as professor of pathology in the Johns Hopkins University.

The governor of Colorado has vetoed the bill to regulate the practice of medicine in that State on the plea that it favors trusts.

At the eighteenth annual commencement of the Woman's Medical College, held this past week, three women received their degrees.

At the first commencement of the Maryland Medical College of Baltimore seventeen candidates received their degrees. This school has made wonderful progress since its foundation.

The daily papers announce that Baron Heyl zu Herrnschein, a native liberal member of the Reichstag, has contributed 3,000,000 marks, or about \$750,000, to the tuberculosis-asylum movement in Germany.

The fourteenth annual conference of State and Provincial Boards of Health of North America was held in Richmond during the past week. Dr. John S. Fulton of Baltimore was one of the delegates.

Dr. William F. Lockwood has been elected professor of therapeutics, materia medica and clinical medicine in the College of Physicians and Surgeons, and Dr. Samuel J. Fort associate professor of materia medica and pharmacy in the same school.

The Tri-State Medical Association of Western Maryland, West Virginia and Western Pennsylvania will hold its semi-annual meeting at Markleton, Pa., June 22. The members will be the guests of the Markleton Sanitarium, of which Dr. Crossman is resident physician.

The fiftieth annual meeting of the Georgia Medical Association, held at Macon last month, was a great success. The following officers were elected: President, Dr. F. W. McRae, Atlanta; first vice-president, Dr. J. B. Graham, Savannah; second vice-president, Dr. H. B. McMaster, Waynesboro; secretary, Dr. R. L. Taylor, Griffin; treasurer, Dr. E. C. Goodrich, Augusta. Atlanta is the next place of meeting.

At the last meeting of the Baltimore County Medical Association the following officers were elected: President, Dr. W. J. Todd of Mt. Washington; secretary, Dr. P. F. Sappington; treasurer, Dr. L. Gibbons Smart; executive committee, Drs. Charles G. Hill; H. B. Stevenson and W. P. E. Wyse; committee of honor, Drs. Jackson Piper, E. M. Duncan and R. C. Massenberg. The following honorary members were elected: Drs. W. L. Smith of Jarrettsville; Joseph T. Smith, Charles Donovan, Eugene F. Cordell and Samuel T. Earle of Baltimore.

At the recent meeting of the Maryland Homeopathic Society the following officers were elected for the ensuing year: President, Dr. W. Dulany Thomas of Baltimore; vice-presidents, Dr. Bartus Trew of Baltimore and Dr. G. H. Wright of Forest Glen; recording secretary, B. C. Catlin of Baltimore; corresponding secretary, Dr. John Evans of Baltimore; treasurer, Dr. L. B. Palmer of Baltimore; librarian, Clarence Nichols of Baltimore; board of censors, chairman, Dr. Mifflin, Dr. H. J. Evans, both of Baltimore, and Dr. John Garrison of Easton, Md.

Washington Notes.

Acting Assistant Surgeon Chas. L. Baker, at Augusta, Ga., has been ordered to this city.

Acting Assistant Surgeons M. W. Rainold and Charles Burning have been assigned to duty in Cuba.

Acting Assistant Surgeon R. E. Austin, at Greenville, S. C., has been ordered to accompany the Tenth Cavalry to Santiago de Cuba.

A movement is started by the alumni of the Garfield Hospital Training School for Nurses to bring all the trained nurses of the city into one organization.

Passed Assistant Surgeon F. W. Olcott has been assigned to the Texas, Assistant J. H. Payne to the Indiana and Passed Assistant J. C. Rosenblauth to the Buffalo.

The ninth annual meeting of the American Electro-Therapeutic Association will be held in Washington, D. C., on September 19, 20 and 21, 1899, under the presidency of Dr. F. B. Bishop of Washington.

Surgeon J. D. Gatewood has been ordered to duty in the Bureau of Medicine and Surgery; Surgeon J. C. Byrnes from Norfolk to the Massachusetts, relieving Surgeon S. H. Dickerson, who is ordered home.

The following changes will take place at the Emergency Hospital June 1: Dr. F. H. Morhart, the present resident physician, retires; Dr. J. L. Adams becomes resident physician; Dr. W. E. Whitson becomes first assistant, and Dr. W. C. Williams will be made second assistant.

About forty physicians banqueted Dr. J. J. Kinyoun at Rauscher's Saturday night. This was a farewell testimonial of regard to Dr. Kinyoun, who has been ordered to San Francisco by the Marine Hospital Service. Dr. Jos. Taber Johnson acted as toastmaster, and Drs. Woodward, W. W. Johnston, Stone, Kober and Sternberg responded to toasts.

Assistant Surgeon Robert H. Zanner, U. S. A., has been ordered from this city to Camp Meade, Pa. Acting Assistant Surgeon Owen W. Stone, U. S. A., has been relieved from further duty in the Department of Santiago and is ordered to duty in the Division of Cuba. Acting Assistant Surgeon Alden E. Smith, U. S. A., has been relieved from further duty at Matanzas, Cuba, and is ordered to Freeport, Ill., for annulment of his contract.

Book Reviews.

RETINOSCOPY (OR SHADOW TEST). By James Thorington, M.D., Adjunct Professor of Diseases of the Eye in the Philadelphia Polyclinic and College for Graduates of Medicine, and Assistant Surgeon to Wills Eye Hospital. Third edition. Price \$1.00. Philadelphia: P. Blakiston's Son & Co.; Baltimore: Cushing & Co.

We are pleased to see that this work has been received with such favor as to call for a third edition in less than two years. Its success must indeed be very gratifying to the author, not only because of the appreciation shown of his work, but because of the evidence thereby afforded that retinoscopy is attaining its proper position in ophthalmology. We fully agree with Dr. Thorington in the axiom he suggests, that "with an eye otherwise normal, except for its refractive error, and being under the influence of a reliable cycloplegic, there is no more accurate objective method of obtaining its exact correction than by retinoscopy."

The colored illustrations of the new edition are a marked feature and will help the beginner with this method of examination very materially. In fact, the whole subject is handled in a manner admirably adapted to the student; the explanations are clear and concise, and we unhesitatingly recommend the book to those desirous of learning retinoscopy.

AN EPITOME OF HUMAN HISTOLOGY. For the Use of Students in Connection with Lectures and Laboratory Work. By A. W. Weyse, M.D. Pp. i-ix and 1-908. New York: Longmans, Green & Co. 1898.

The book before us is not intended to be a text-book of histology nor is it the author's idea that it shall replace a text-book. It is rather a syllabus of histological lectures, presenting the subject and the majority of the terms met with in the most compressed form. One would scarcely believe it possible to even mention as many structures in the space at the author's disposal as he has succeeded in doing. But the histological entities of the various organs and tissues are not only mentioned, but also briefly and accurately described.

REPRINTS, ETC., RECEIVED.

A Case of Endothelioma Lymphangiomatodes of the Cervix Uteri. By Hunter Robb, M.D. Reprint from the *Transactions of the American Gynecological Society*.

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Original Articles.

SERUM THERAPY.

WITH THE REPORT OF THREE CASES
IN WHICH THE STREPTOCOCCUS SERUM
WAS USED.

By Jesse Shoup, M.D.,

Washington, D. C.

READ AT THE APRIL MEETING OF THE WASHINGTON
MEDICAL AND SURGICAL SOCIETY.

It is impossible to think of serum therapy without at the same time having in mind the terms toxine, antitoxine and immunization, and their relations to one another.

In speaking of a contagious disease caused by a specific micro-organism such as diphtheria we no longer think of the bacillus itself causing the effect which we term diphtheria. We know that the toxine thrown off from the bacilli is the immediate cause of the disease.

When a man has received the toxine of a pathogenic bacterium in his system the physician does not attack the disease directly. He sustains the patient until there is produced within his body an antidote for the poison—an antitoxine for the toxine. When a sufficient amount of antitoxine is formed to neutralize the toxine recovery begins. Before we knew that disease was ever caused by pathogenic bacteria the physician sustained his patient until the disease had run its course, not knowing why it ran a limited course.

Besides knowing that toxins and antitoxines really exist, but little is definitely known in regard to them. We know that a precipitate from a culture medium gives the reaction of albumose and an organic acid or alkali. We know further that this

precipitate contains the toxine because of its specific effect on an animal inoculated with it, but beyond this, and that some are enzymes, but little is known.

We say a human being or animal is immune when there is enough antitoxine contained in his or its organism to offset that quantity of toxine from a pathogenic bacteria, which, if not controlled, would cause disease or death. But as to our knowledge of immunity we are still in a stage of theory. Almost as many theories have been advanced as there are writers on the subject: Chauveau's "retention theory," the theory that immunity exists by virtue of some bactericidal products retained or deposited in the tissues; Pasteur's "exhaustion theory," that immunity is the effect caused by the subtraction from the tissues of the specific pabulum of a micro-organism; Roux's theory, that nucleic acid is developed, which either neutralizes the toxine or is bactericidal, and the theory of the alkalinity of the blood increases with the degree of immunization, and causes it.

All these theories have few adherents now. Buchner claims that there is present normally in the body a protective substance—an alexine, the office of which is to repel invasion of the tissues, that antagonizes the bacilli. Gruber goes further and claims that there is formed in all animals undergoing the process of immunization a substance which he terms agglutinin, which renders the sheaths of the bacteria sticky, causing them to adhere and lose their motility, thereby allowing the alexine of Buchner to more easily destroy them. The theory of phagocytosis, first held by Sternberg, is generally admitted now to play but a minor part in immunization, the leucocyte only removing and devouring the dead bacilli. The theory that is most

generally accepted now, and which seems most tenable, which explains best the phenomena of immunization, is the theory of cell excitation—the theory that body cells are stimulated to greater resistance to the formation of antitoxines. It is known that other substances cause immunity to some degree besides toxines and antitoxines. For instance, Dr. Vaughan has demonstrated the power of nucleins to cause immunity, which he also explains on the theory of cell excitation. This seems to support Buchner's theory of alexine.

Cell excitation can be presumed to take place to some extent, and, probably, does when any foreign substance is injected into the tissues.

We speak of acquired immunity and natural immunity. Acquired immunity has been divided into actively and passively acquired immunity. Actively acquired immunity is where the human being or animal acquires immunity by the production of an antitoxine from the effect of a toxine entering its system. Passively acquired immunity is where the serum of an immunized animal is injected directly into the human organism or that of an animal, rendering it practically immune at once. Natural immunity is where a human being or animal successfully resists the inoculation of a pathogenic bacterium without the aid of artificial immunizing agents.

Dr. Thompson of New York, in the *Journal of the American Medical Association* for January, 1898, holds that "natural immunity is not different from acquired immunity, but that it is originally acquired immunity, which has been perpetrated for an unusually long period of time through succeeding generations." In other words, natural immunity is inherited immunity. He holds—and I think justly, too—"that the blood has no power to transmit lasting immunity, since the blood is an ever-changing quantity; that only by the stimulation of the body cells and tissues can lasting immunity be transmitted," since the cells alone have power to transmit impressions to succeeding cell generations. He classifies all artificial immunizing agents under two heads: "First—They may be of the na-

ture of a ferment, stored like an enzyme in the body of a leucocyte, or that of the germ, or developed free in a culture medium; in this condition they may be supposed to act on the blood serum almost indefinitely after inoculation, and, like the digestive ferments, pepsin, trypsin, etc., being themselves not destroyed at once, but serving as agents for the manufacture of antitoxine out of the cells. Second—They may be finished products, true antitoxines, incapable of self-propagation, and, therefore, incapable of maintaining indefinitely immunity after inoculation as far as their own substance is concerned. If, therefore, it can be shown that they do produce lasting immunity after inoculation it must be through stimulation of leucocytes or of the body cells and tissues to greater resisting power."

After all, immunity is not constant. One may be immune to a disease today and successfully inoculated later. Experience and experiment have shown that anything lowering vitality lessens immunity.

We know that immunity to diphtheria and erysipelas lasts but a short time. We know that inoculation with one pathogenic bacterium favors inoculation with another to which the organism was previously immune, which seems to show that the body cells can be exhausted or overstimulated, as it were.

Antitoxines are now prepared from cultures of a few of the pathogenic micro-organisms by successive inoculations in animals, and kept in readiness to be used in the human being or animal. These antitoxines have been mostly successful in offsetting the influence of the specific toxine from the bacilli, rendering the patient or animal almost at once immune, for a time at least, thereby saving valuable time, shortening the duration of sickness and lessening the number of deaths.

It falls to us, as a practicing physician, to administer these antitoxines, and we are getting past the point where we give them according to the directions only from the bacteriological laboratory. To the laboratory we have added clinical experience. We know that some antitox-

ines of today are liable to deteriorate, and we cannot put our trust in antitoxines simply because it is labeled such without knowing who made it, how and where it is kept and how old it is. We know by experience that an antitoxine must be given in large initial doses early in the disease if we wish to get the best results. This is in accord with the knowledge that antagonism to the bacilli first takes place within the blood-vessels, and while there are the most accessible and, therefore, the most readily destroyed. Sudden deaths have been reported from the injection of antitoxine. Antitoxine poisonings have been reported. After-effects of various kinds have been reported from the use of antitoxines, showing that they are not as free from danger as it was at first believed. Those sudden deaths are usually attributed to air emboli, but Dr. McClintock's experiments make that cause seem most unlikely indeed. He, in a series of experiments upon horses and other animals, by the injection of large amounts of air directly into the veins, failed in but one instance to produce death thereby, and that in a rabbit that had been given twenty cubic centimeters of air into the veins, causing death in several minutes.

He says that "a corresponding amount of air for a 40-pound child would be 400 cubic centimeters, or far more than enough to occlude all the branches of the pulmonary artery." In all the rest of his experiments, injecting large amounts of air directly into the veins, unfavorable symptoms, if any, soon passed away. It seems, then, we will have to charge these sudden deaths to something else—if not shock, then it must be the antitoxine.

So in giving antitoxine too freely there seems from evidence that a due amount of caution must be used. I have never had any alarming symptoms to appear, but I have had annoying after-effects in several cases.

CASE REPORTS.

Case 1. Mr. P., age sixty-five, has had good health, and was generally considered rugged. When first called to see him, found him suffering with acute otitis media purulenta following grippe, with a profuse discharge of pus from the

ear. At the end of the first week a perichondritis developed, followed by an attack of erysipelas, which spread over the side of his face and entire scalp. The patient complained of a great deal of pain in his ear and side of the head and face, which increased with the spreading of the erysipelas. He was put on the usual treatment for erysipelas, tincture of the chloride of iron and quinine, with ichthyol ointment, spread over the face and scalp, but he gradually grew worse, fever ranging around 104° , pulse weak, semicomatose condition, being stupid and drowsy. About the eighth day of the disease, and the third day of the erysipelas, I gave him twenty cubic centimeters of Marmorek's streptococcus serum. The temperature on the evening of the day of the injection was 105° , pulse 145, four hours after injection of the serum. At this time the patient was thought by friends to be dying, and I was sent for. I found him in a very critical condition, but, after administering heart stimulants and nourishment, he seemed better and got through the night fairly well. At my next visit the following morning, 10 A. M., his temperature was 102° , pulse 100, general condition better in every way. The evening of this same day his temperature continued to decline, and thirty-six hours after the injection his temperature was normal, pulse 88, and he seemed bright and talkative.

The swelling had not extended and was less red. He showed signs of improvement and took his nourishment well. The temperature remained normal and he went on to a steady and complete recovery.

Case 2. Typhoid fever patient, who had suffered a relapse at the end of the fourth week. During the fifth and sixth weeks his condition and temperature presented so much the appearance of septic infection, although I could not in any way account for the infection, that I decided to give him the streptococcus serum, and accordingly I gave him twenty cubic centimeters in two doses—ten cubic centimeters as the initial dose and on the following day ten cubic centimeters more. There did not appear to be any change in his condition until forty-

eight hours had elapsed after the second injection, when his whole condition suddenly changed, temperature rapidly falling and remaining normal, and he rapidly recovered without any unfavorable symptoms. Of course, in this case we are not justified in saying the serum caused the change for the better, no culture having been taken, but for myself I can hardly help feeling that the serum did have a great deal to do with the patient's recovery.

Case 3. The serum was given for supposed mixed infection, no examination for the streptococcus pyogenes having been made. It was a case of pulmonary tuberculosis, with continued fever. I gave the first ten centimeters of Marmorek's serum without any influence on the fever. After an interval of one week I gave ten centimeters of another make of serum without any effect on her fever. After twenty-four hours' gave ten cubic centimeters more of this serum, with the same result. This case was negative throughout as far as I could see, no benefit being derived from the injection. I wish to say that in this case the serum caused at point of injection a great deal of swelling and pain, which annoyed the patient a great deal, and at each injection of the serum caused a decidedly depressing influence on the patient—a sort of reaction, which seemed to cause a slight rise in the fever, if anything. This same patient about five days after injection had an attack of sub-acute rheumatism, which I attribute somewhat to the serum. I never had any swelling of joints before.

In conclusion, I wish to say that the streptococcus serum as now put up for the physician's use is entirely too bulky; there is too much serum to inject, and causes too much inconvenience to the patient. I think it ought to be more concentrated. Dr. W. H. Park has shown by experiment that streptococcus serum is almost useless after it is four weeks old. This is very important, since some claim serum to keep indefinitely. As to the therapeutic value of streptococcus serum in streptococcus infection I think there is enough evidence now to prove without doubt its immunizing power. As to

any power it has on other than the streptococcus infection there is not enough evidence to form trustworthy conclusions. Dr. McNabb reports two cases in the *New York Medical Record* for February 25, 1899, of cerebro-spinal meningitis treated with the streptococcus serum. In both the serum seemed to cause improvement of the symptoms, and in one a cure was effected, but in neither case was enough serum given early in the disease.

I wish to quote further from Gruber's experiments and conclusions as excuse for giving serum in my second case. Gruber claims "that both active and passive immunity are identical in nature, and both forms of immunity depend upon the presence of agglutinin; that agglutinins are specifically different. Each kind of bacteria has its own kind of agglutinin. The influence of these specific agglutinins is not, however, limited specifically. It shows gradation in intensity of reaction, the maximum intensity of action being manifested upon its own kind. On other species the action is more intense the more closely allied the microbe is to that by means of which the agglutinin was prepared."

HEADACHES AND NERVOUS SYMPTOMS.

CAUSED BY ERRORS OF REFRACTION AND HETEROPHORIA.

By James J. Mills, M.D.,

Assistant in Ophthalmology and Otology, Johns Hopkins Hospital; Consulting Oculist Baltimore City Insane Hospital.

RARELY a day passes that I do not see in my private practice or my clinical work at the Johns Hopkins Hospital some sufferer from headaches, either periodical or almost constant, who has sought relief in various drugs regardless of the origin of the trouble.

There are many individuals who unquestionably owe their headaches to some abnormal condition of the blood, various nasal abnormalities, etc. Among the former I would name those suffering from Bright's disease, diabetes, anemia, malarial conditions, etc. Yet the patients suffering from these conditions form but a

small percentage as compared with those in whom scientific means can detect no real disease, and in those I shall mention presently all the above conditions may be excluded.

Patients who speak of their acuteness of vision and prove their statement by reading the proper line of test type at twenty feet are often surprised at their diminution of sight under atropine. When their refraction error is corrected they become conscious for the first time of the muscular effort which they have been compelled before to make in order to see without the correcting glass. These facts are well known to oculists, but physicians in general are often much surprised at the disappearance of various nervous phenomena when refractive errors or heterophoric conditions are corrected.

It is particularly interesting to note those cases of persistent frontal (sometimes occipital) headaches, with vision 20-20, in which there is no manifest error of refraction, atropine failing to reveal any latent condition, and where insufficiency of some one of the ocular muscles may be detected. If the heterophoria be not great the relief afforded by a weak prism is often surprising, and if the muscular error is considerable tenotomy is unquestionably in order, and will, in the majority of properly selected cases, give entire satisfaction. During the past year I have performed thirty-odd tenotomies for insufficiency of the ocular muscles; out of this number five were for exophoria, the rest being for esophoria.

With the exception of two or three, who received only partial relief, the rest were entirely satisfactory. As before mentioned, in the cases below, taken from my office case-book, all conditions not strictly ocular have been carefully excluded.

Case 1. Mr. S., aged twenty-seven, a prominent merchant, complains of almost constant headaches, with frequent nausea. Has diplopia occasionally, which is found to be homonymous. Has frequent attacks of vertigo, and is unable to read for any length of time on account of extreme drowsiness. In appearance he is robust, and after a careful examination no pathological lesion could be demonstrated.

Upon examination I found between nine and ten degrees of esophoria for twenty feet and about the same for reading distance. An operation was advised after the muscles had been tested at several different times to confirm the amount of esophoria given above. Accordingly a tenotomy of the left internal rectus muscle was performed, a free dissection being made. His refraction error, which was = right eye + 0.50 cyl., ax. 90°; left eye - 0.25 + 1.25 cyl., ax. 90°, was corrected and the glasses were ordered for constant use. Over two years after the operation only between one and two degrees of esophoria were found; disappearance entirely of all the above symptoms. It must be noted that from the time of the operation up to this date the diplopia, nausea and vertigo disappeared and reading and writing were resumed a few weeks after.

Case 2. Mrs. L., aged thirty-eight, has complained of frequent headaches, vertigo and rarely diplopia. She has a divergent strabismus. Upon examining each eye separately, with the correction of refraction, vision was found nearly 20-20 in each eye. On January 22, 1896, a tenotomy of the left external rectus muscle was made, and on February 17 a tenotomy of the right external rectus was performed. Some weeks later her error of refraction was corrected and the glasses prescribed for constant use. Right eye - 0.75 sph.; left eye - 1.00 - 2.00 cyl., ax. 155°. With this correction she had binocular fixation. A few days later she reported complete disappearance of vertigo, headache, etc. I have recently seen her, over two years after operation; binocular vision is maintained and the other symptoms remain absent.

Case 3. Miss H., age about fifty, has constant pain over eyes, often diplopia, accompanied by vertigo and sometimes nausea; when sewing she complained of what she called doubling of the needle. She was wearing simple-cylindrical lenses, and said she had to have them changed every four or five months. Upon repeated examination I found a little over six degrees of hypophoria, with slight exophoria for distance. She declined operation. She was given for a distance glass

the following: Right eye — 1.00 cyl., ax. 180° , prism $1\frac{1}{2}^\circ$, base up; left eye — 1.25 cyl., ax. 180° , prism $1\frac{1}{2}^\circ$, base down. A glass for near work was also prescribed. I explained that she would at first find the glasses difficult to wear, but by persisting in their use comfort would follow. At my request she recently reported to me, and said the glasses had almost entirely relieved her, headaches rarely recurring. This is nearly two years after the glasses were ordered. I mention this case because it is not often, in my experience, that prisms with bases up or down will afford relief without change being required for so long a period.

Case 4. Miss H., aged twenty-nine, consulted me on account of various nervous phenomena (twitching of facial muscles, vertigo, etc.) from which she had suffered for several years, believing they might be caused by her eyes. The ophthalmoscope revealed a myopia of high grade, accompanied by slight chorio-retinal changes. She was wearing right and left eye — 11.00 sph. constantly. With this correction she shows an exophoria of ten degrees for twenty feet and about the same for the reading distance. Tenotomy of left external rectus muscle was performed. When she left the city a few weeks after only two degrees of exophoria remained. She has been enabled to resume the advanced studies she was pursuing in a Northern college, and when last heard from, nearly two years after the operation, complete relief was reported.

Case 5. T. S., aged ten, a healthy-looking lad, was brought to me by his mother on account of a habit-chorea which she had noticed for about one year. She said the family physician had given him the usual remedies, arsenic, bromides of soda and potash, etc., without any diminution in the facial spasm or other choreic movements. Upon ophthalmoscopic examination hyperopia of high grade was found. The muscular balance was normal; the eyes were atropinized and the proper convex glass prescribed. He recently reported to me, and his mother said that two or three days after wearing his convex lenses continually the spasmodic twitchings began to decrease.

When I saw him last they had absolutely ceased.

Case 6. F. H., a student at a college many miles from the city, consulted me on account of the excruciating headaches from which he had suffered for several years past. They had recently become so severe that he was compelled to discontinue any mental work, and felt obliged to lie down many hours each day. He had been under the care of the college physician, but all the remedies prescribed failed to afford relief for more than a brief period. His face was intensely congested, having a purplish-red hue. He said it had been so for a year or more. He hesitated and stammered so much in speaking that it was often difficult to understand him. He complained of the constant sensation of having a string tightly tied around his throat. Upon ophthalmoscopic examination both eyes were found emmetropic. He showed an exophoria of ten degrees for twenty feet and twenty degrees for the reading distance, or about fourteen inches. I advised tenotomy, but it was declined; so prisms were ordered for constant use, and he was informed that the relief would be only temporary.

For six months he enjoyed comparative comfort, then returned for operation, his suffering being more severe than formerly. A free tenotomy of the right external rectus muscle was performed. The following day the congested appearance had disappeared and he already felt great relief. Some weeks afterwards he reported to me; he then showed two degrees of exophoria for twenty feet and about six degrees for the reading point. His headaches had not reappeared, and the congested appearance of his face was noticeably absent. He is now studying from six to eight hours daily. The stammering and hesitancy in speaking has entirely disappeared.

Case 7. Mrs. L., aged thirty-five, has an alternating divergent squint; never had binocular fixation; has suffered with headaches ever since she can remember, and of late the sensation of pressure over the top of her head has become so severe that she has been obliged to discontinue her occupation. All other causes being

excluded, for she had secured the best medical advice, her family physician advised the examination of her eyes. Ophthalmoscopic examination revealed normal fundi; vision 20-20. I proposed tenotomy, which was agreed to, the right external rectus muscle being divided. Homonymous diplopia resulted, lasting for a week or more. After this binocular fixation resulted, and has been maintained for over one year up to this date. The headaches have disappeared, and the patient's general health has greatly improved when last I heard from her.

Where a permanent strabismus exists, there being no attempt upon the part of the patient at binocular fixation, no nervous phenomena follow, but where exophoria or esophoria of high degree exist, and the images can be blended by great effort in spite of the muscular error, then many of the nervous conditions above mentioned are demonstrated. We must admit that eye defects, or anomalies of the ocular muscles, are liable to become causes of impaired nervous energy, because they demand an excess of nervous expenditure. We are then forced to the conclusion that the earlier this source of physical depression is removed the better are the prospects of the patient so relieved of escaping conditions which impaired nervous energy necessarily tends to hasten or develop.

It is not my intention to impart the impression that I believe errors of refraction and muscular anomalies are the origin of all the ills to which the flesh is heir or that their correction will cure all headaches, etc., but I do believe that they play a far more important part in nervous disturbances, remote and otherwise, than is usually recognized.

The above are but a few of many cases I could offer to show where, after careful and repeated examinations, tenotomy was surely indicated and the relief that followed.

The cases of tenotomy mentioned in this paper I have had an opportunity of observing from two to six years, besides many others of more recent date. I believe the results will be found of interest to the profession.

NOTES ON RECENT SCIENTIFIC LITERATURE.

By William Lee Howard, M.D.,

Baltimore.

V.

THE increasing scientific study of the organic basis of life—sexual activity—is noticeable among the progressive medical men of today. Too long has the physician studied and written about the gross appearance of life, its objective entrance into the struggling mass of humanity, or else dealt with the pathological states or anomalous conditions found after the individual has learned from sad and expensive experience what he could mostly have learned through proper instruction. The physician has left a vast hiatus, a deep chasm, between the false and real basis of life. He has not failed to inform himself upon the diseases certain to follow a misconception of sexual laws, but rests in a haze, doses in a crepuscular atmosphere, as regards the true attitude of man and society in relation to the basis of all organic existence, sexual energy. I speak in reference to the silence or whisperings of the practitioner of certain physiological facts and pathological states existing among individuals of both sexes.

Why should a presumably scientific physician wish to ignore a habit neurosis, such as masturbation in a young woman, or fail to recognize the twist in the sexual center or centers of a brilliant man? Such a physician assumes a false morality; an appearance of disgust which is in reality a badge of ignorance, for frequently this same physician can be found with his nose and eyes between two mottled limbs, peering with eagerness and pleasure into the mephitic anal cavity of a constipated coal-heaver, or else penetrating with sinuous fingers the mucoid arcana of a *nymph du pavé*.

A recognition of the pathological states of the sexual centers as demonstrated in certain psychical conditions and morbid acts; a full comprehension of the power of association and suggestion in the adolescent sexual neuropath, and the knowledge that the nature of association, suggestion

and instruction to such individuals means the difference between hell and health, is the first duty of the earnest physician to fully accept and appreciate.

If any one pathological state, such as congenital sex perversion, is too disgusting to be recognized, then a pathological state producing syphilitic sores of the vulva is too filthy to be treated.

These ideas have been forced from me through several incidents occurring lately. Just as I started to write these notes I received a letter from a parent begging me to come and treat his son, a mere lad of nineteen years, who had abnormal sexual habits and desires. The father had rightly become disgusted with the indifference of his family physician in the case, and it had culminated in the physician flatly refusing to treat such "dirty" cases. The case is in a Northern State, and at the time of writing the lad was in a delirium.

Another noted incident is the Bedborough case; the Havelock Ellis' prosecution. This particularly aroused my ire, as I had read much of Ellis' copy, and looked forward to seeing the English physician and publicist placed in a position where they would understand that a human being is just as liable to have the growth in the cells making up the sexual center disturbed and distorted as in the cells making up any other center, physiological or psychical. To send a man to prison because he was deformed in certain psychical centers is as good a demonstration of ignorance and barbarism as whipping a child because it was born with a hare lip.

It is scarcely necessary for me to tell my readers anything about Havelock Ellis. Havelock Ellis is England's foremost criminologist and the editor of the modern works on criminology. He is also one of the leading authorities on sex perversion and inversion. His book on the latter subject is a classic. It is cleaner, has more of the pure scientific atmosphere and shows greater study and research than any work yet published, not excepting that of Krafft-Ebing or Schrenck Notzing.

On May 31, 1898, Mr. George Bedborough was arrested for selling to a dis-

guised detective a copy of Havelock Ellis' "Sexual Inversion." He was charged before Sir John Bridge at the Bow Street Police Court with "publishing an obscene libel" (in other words, circulating an indecent work), with the intention of corrupting the morals of Her Majesty's subjects. Mr. Bedborough was simply a seller of the book, it must be added, and in no way responsible for its production. The trial resulted in the suppression of the work in England, but the book will be published in Germany and in this country.

In a communication from Dr. Ellis he fully explains his attitude. It is creditable to the Anglo-Saxon that he cannot understand the various anomalies existing in sexual activity; that sexual abnormalities are so infrequent in the past history of this manly race that even the knowledge of such matters is a stranger to him. However, such conditions as Ellis writes of exist, and the same conservatism that kept Bradlaugh out of the House of Commons is now keeping scientific knowledge of supreme importance out of the house of the English physician.

Dr. Ellis writes: "'Sexual Inversion,' published at the end of the year 1897, is the first volume of a series of 'Studies in the Psychology of Sex,' which I projected over twenty years back, and which I have ever since had before my mind as the serious and vitally important subject to which the best energies of my life should be devoted. The work will extend to five or six volumes, and although this first volume discusses a form of perverted sexuality, the Studies as a whole will deal mainly with the normal sex impulse. It should be needless to point out the magnitude and the importance of the problems arising in such an investigation; in its first volume, moreover, we are brought face to face with a practical question which is constantly demanding attention both in society and the law courts. Whatever diffidence one may feel in approaching questions of this nature, there should be no doubt as to the necessity of so doing provided we approach them seriously..

How seriously I approached this

great subject may be judged, not only from the long period of labor and preparation spent on the work, but from the fact that I occupied several years merely in the preliminary task of attempting to clear the ground by inquiring into the psychological and anthropological secondary sexual differences of the sexes, the main result of this special inquiry appearing in 1894 under the title of 'Man and Woman.' Before its publication in England, 'Sexual Inversion' had been translated into German by Dr. Kurella, a physician and criminologist of distinguished reputation, and published at Leipsic. In its final English shape it expresses my most mature convictions on the subject it treats; the opinion of judicious friends had been obtained at doubtful points and every sentence carefully weighed. Errors of fact or opinion possibly may be found, but there is not a word which on moral grounds I feel any reason to regret or withdraw. Any question of retraction or apology could not, therefore, possibly arise; it would be a kind of intellectual suicide."

Society Reports.

ASSOCIATION OF AMERICAN PHYSICIANS.

FOURTEENTH ANNUAL SESSION, HELD AT WASHINGTON, D. C., MAY 2, 3 AND 4, 1899.

WEDNESDAY, MAY 3—SECOND DAY.

Dr. William Osler spoke of "A Case of Hemochromatosis, With Exhibition of Patient." The patient is a man of good family history, who noticed about four years ago that he had begun to change in color. He is a vigorous, healthy man, but on examination last Saturday I found a well-marked hypertrophic cirrhosis of the liver, with enlargement of the spleen. He has the long duration of the disease, the increasing bronzing of the skin, the enlarged liver, and has had recurrent attacks of purpura. Examination of the urine shows the presence of iron.

Dr. Wm. H. Welch gave a "Report of a Case of Hemochromatosis, With Exhibition of Specimens." I have brought over the specimens from a case of this disease which have been very thoroughly studied

by *Dr. Opie*. The patient presented extreme pigmentation of the skin, and examination of the various organs of the body have shown that they are all more or less pigmented and have undergone hypertrophic changes. Two kinds of pigment are present, the iron-containing and iron-free pigment, the latter being found principally in the heart muscle and in the walls of the small intestine.

Dr. Adami: I have seen a case of this disease almost identical with the one referred to by *Dr. Welch*, the woman having such an extreme pigmentation of the skin that she was known in the wards as "Blue Mary."

Dr. Welch: I believe *Dr. Adami's* is the only case recorded as having occurred in a woman.

Dr. S. J. Meltzer of New York read a paper on "Otitis Media in Lobar Pneumonia of Children." He related a case, and said that at the onset there was usually a earache, which lasted for one day, and either lessened or disappeared, and in none of the cases did the pain outlast the pneumonia. There was no discharge from the ear.

Dr. Jacobi did not think it was an otitis media when there was no pus. Possibly the earache was simply an angina, and that might be the connection between the two symptoms. This was simply a suggestion.

Dr. Kinnicutt said that if so many children die from various causes with an otitis media, that must militate against his reasoning.

Dr. Jacobi said that the presence of bacteria in the ear should not be blamed as a proof of this trouble. We do not diagnose diphtheria if we find the organism in the throat, and also we can find the tubercle bacilli without the presence of tuberculosis. The presence of bacteria does not prove that they constitute a part of the morbid process. The presence of mucus and muco-pus does not prove it either. He believed while those who say that the muco-pus in the middle ear is normal may not be right, the others who say it is an otitis media are not right either.

Dr. T. M. Rotch of Boston said it was important to recognize the frequency of

affections of the middle ear in young infants, but such young children usually do not have any pain at all. He has found it necessary to have the ears examined once a week as a routine way.

Dr. Meltzer said, in conclusion, that he had not seen cases with pus in lobar pneumonia, and others have believed also it was not otitis media.

Dr. F. A. Packard of Philadelphia reported "Five Cases of Endocarditis of Tonsillar Origin." He has found these two connected quite frequently, and related five cases. This is an interesting question. In his cases there had been no previous history of articular pain or joint trouble, and he thinks these cases are simply tonsillitis, causing secondarily endocarditis. The staphylococcus has been found at the autopsy in the tonsils and in the pulmonary vessels. It is well to look out for endocarditis in tonsillitis.

Dr. James Tyson of Philadelphia said that endocarditis was not the only disease from this cause. He thought that nephritis also came from this, and the two conditions were quite analogous.

Dr. Wm. S. Thayer related a case of a child four years old that had a slight sore throat, and then a convulsion and high fever, with some slight stiffening of the neck, and it died within thirty-six hours. He thought it was cerebro-spinal meningitis. The autopsy showed nothing abnormal, but cultures showed a general streptococcus infection. He agreed with what *Dr. Packard* said.

Dr. Thomson spoke of a case of quinsy, which was followed by rheumatism. The next day he had pleurisy, and then he had a heart murmur, with signs of parotiditis, and then ecchymotic spots on the body.

Dr. Dock thought that rheumatism was the manifestation of various kinds of affections. He mentioned a woman who had rheumatic iritis of an acute type and the subacute joint swelling. Her pain was relieved in the usual way, and the only prodrome was a sore throat two weeks before.

Dr. Rotch said that *Dr. Thayer's* case was like the angina described by Senator ten years ago. *Dr. Packard* did not know how normal his valves were before the attacks of tonsillitis.

Dr. Packard said, in conclusion, that in three cases he did not know anything about the heart, but he did in the other two. The point he wished to make was that we ought to stop talking about tonsillitis and endocarditis as members of the rheumatic family. They are evidences of an infection from the tonsil to the endocardium.

Dr. George Dock of Ann Arbor reported "A Case of Fatal Epistaxis, With a Study of the Blood." The patient was admitted for epistaxis which had existed for six weeks. He had had fever, then catarrh. When admitted he had been bleeding. His pulse was 120 and was dicrotic. His blood was thin; urine negative. Hemorrhages into the retina. He went to the throat clinic first for the bleeding, and then came into the ward. Plugging was tried and then transfusions of gelatine. He died of acute edema of the lungs. The autopsy showed a variety of affections. The examination of the blood was most complete. There was a great diminution in the number of red blood corpuscles reaching at one time 360,000 c. cm. There were many nucleated red corpuscles in the field, and a moderate leucocytosis. A small endothelioma of the nasal septum was found.

Dr. Thayer had seen several years ago a case like this in a case of pernicious anemia in a man of sixty. All the corpuscles were of the smaller variety, with small nuclei, and in the field there were often as many as fifteen nucleated red blood corpuscles at the same time.

Dr. Stengel said that in the examination of the blood he had never found as many nucleated red blood corpuscles as were found by *Dr. Dock* or *Dr. Thayer*. There was no sharp line between the different forms of nucleated red corpuscles. Some say that in these kinds of blood corpuscles the diagnosis of pernicious anemia is not to be thought of, but that is not so.

Dr. Osler mentioned a form of epistaxis in a man. He had seen three instances in early childhood recurring and often almost proving fatal as superficial varicose angiomas over the surface of the skin. Two cases were in brothers, and one died recently of cancer of the stomach. One looked like a case of acne. There was nothing in the literature like it.

Drs. J. G. Adami, Maud E. Abbott and F. J. Nicholson of Montreal spoke of "The Diplococcus Form of the Colon Bacillus." He described small bodies in the liver cells, which he thought were bacterial. He described their bipolar form of staining. He described their bacteriology, morphology and the results of inoculation.

Dr. Welch said that *Dr. Adami's* investigations were interesting, and they had the value of suggesting the interpretation of these little intracellular bodies that he had been able to demonstrate. He apparently describes two distinct diplococcus forms of the colon bacillus, and he thought that these were to be separated from each other. At the Johns Hopkins Hospital he had for years been making systematic observations in the autopsies, and had found the colon bacillus so very frequently, more particularly in the kidneys and liver, and not so frequently in the spleen, kidneys and bile, that unless there is some evidence of a definite lesion, we attach no importance to its presence. Of course, this idea that certain organisms and certain cells of the body are by process of digestion disposing of bacteria is an important suggestion, but the evidence, while accumulating, and perhaps the most plausible view as that taken by *Dr. Adami*, seems to him to be as yet scarcely conclusive of demonstration of bodies having the morphology of diplococci in the cells, is a justification of this view that is extremely difficult to explain away. Notwithstanding this, it seems that there is still room for a justifiable scepticism as to that interpretation. He thought this work was important and showed the power of the cells to protect the body.

Dr. Adami agreed with *Dr. Welch* in his position of scepticism, as this subject required such careful study that he was perfectly willing to spend some years yet before hoping to convince anyone that this was the proper conclusion.

Dr. Wm. S. Thayer of Baltimore made "A Demonstration of an Acromeglic Skeleton," in which he described the symptoms of the case during life and the anatomical findings at the autopsy.

Dr. Osler said that one of the most re-

markable features of this case was the persistent character of the headache, and yet show here a very small pituitary enlargement, and he never had many disturbances of the visual field.

Dr. James Stewart of Montreal read a paper on "Tumors Involving the Hypophysis," and it was discussed by *Dr. Starr*.

Medical Progress.

ON THE ABSORPTION OF IRON.—Iron has always been a symbol of strength, and from early days the profession and the laity have used iron in weakened conditions and especially in anemia. Now, however, *Dr. A. E. Austin* expresses the opinion in the *Boston Medical and Surgical Journal* that much of the inorganic iron administered to persons is not absorbed. To prove his point he experimented on dogs, and he draws the following conclusions:

1. That iron is constantly being eliminated both in urine and feces even during fasting.
2. That apparently raw meat furnishes an available form of iron for absorption under normal conditions.
3. That inorganic iron, as represented by ferrous sulphate, is non-absorbable.
4. That albuminates and peptonates of iron are absorbable, but to a limited extent.
5. That organic iron, of which hematin and hemoglobin are representatives, furnishes the most easily absorbable and most valuable of all iron preparations.

* * *

THYROIDISM THROUGH MOTHERS' MILK.—The effects of drugs given to a young mother in the nursing child have often been noted. *Byron Bramwell* records in the *Lancet* a case of thyroidism in a child six months old caused by administering thyroid extract to the mother, who had exophthalmic goiter. When the thyroid extract was stopped the child improved, and when it was given again to the mother the child had a relapse. After the child was weaned it had no further symptoms, and treatment was continued to the mother with no further complications.

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BALTIMORE, JUNE 3, 1899.

THAT there are too many medical schools no one will deny, and there hardly seems to be a doubt but that a multipli-

Too Many Schools. cation of schools means a lowering of the standard of medical education. There is really any danger in this country of too high a standard of medical education, but there are perhaps a few schools which demand so much that the graduate enters on his life work laden down with a mass of theoretical knowledge which, as a practicing physician, he will soon forget.

It is a great gratification, if the press reports are true, to see that the Woman's Medical School of New York, which has maintained such a high standard and which has turned out so many good graduates, has decided to close its doors. The reason given was that Cornell and the Johns Hopkins gave such excellent facilities that they were superfluous, and so the faculty and trustees preferred to close their doors rather than to compete at a great loss with abler institutions. This is not exactly consolidation, but it is a step in that direction, and some of the medical schools in Baltimore should decide to retire from the field or combine with others in such a way that the good

material of all will be used and some advantage accrue to the supporters and a better education to the students.

If there is any advantage in being connected with a school which is carried on at a pecuniary loss it must be from the titles and the practice gained. If there are any shortcomings in such a financially weak school it is the student and not the teacher that suffers, and last of all it is the public that bears the brunt of the whole fault. The withdrawal from business of the school just noted is a credit to its teachers and managers, and others might help the cause of medical education by doing likewise.

* * *

AFTER another hard struggle the *Index Medicus* will cease to appear, because there seems to be not sufficient support for it. This is a great blow to those who have cheerfully paid the high price which its small circulation demanded, and those who have used its pages in their literary work will miss it sadly. Of course, there are other works that may be used, and several journals now attempt to publish a sort of index of what appears, but none of them have had the facilities that the *Index Medicus* had.

The Index-Catalogue of the Surgeon-General's Library is the best work of its kind in any language, but it can hardly take the place of a publication issued as frequently as the *Index Medicus*. Too much praise cannot be given Dr. Billings for his past work, and Dr. Fletcher of the Surgeon-General's Library for the untiring work he has put in this publication, and the publishers themselves have for years issued this journal at a loss and simply as their contribution to medical science. There was at first some hopes of continuing this periodical, but Dr. Fletcher has said that the decision to discontinue is final, and all efforts are useless unless some philanthropist should wish to endow it and give it to the profession.

It may be that the demands for such a journal belong to the past, and the lack of support may either indicate the lessening of a spirit of searching medical literature, or it may mean that other and more modern aids have taken its place. Whatever may be the truth, it still remains a fact that there is a feeling of sadness at seeing the *Index Medicus* pass over to the great majority of journals that ceased to live from lack of support.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending May 27, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	..	..
Pneumonia.....	..	11
Phthisis Pulmonalis.....	..	24
Measles.....	31	..
Whooping Cough.....	1	..
Pseudo-Membranous Croup and Diphtheria. }	15	1
Mumps.....	1	..
Scarlet Fever.....	8	..
Varioloid.....	..	..
Varicella.....	4	..
Typhoid Fever.....	2	1
La Grippe.....	..	..

Buffalo will have a cancer hospital.

A consolidation of the charities in Baltimore is under consideration.

Frostburg, Md., has had no deaths from typhoid fever in the past year.

The Woman's Medical College of New York has decided to close its doors.

The recent smallpox epidemic at Alexandria will cost that city little less than \$10,000.

Dr. William Warren Potter of Buffalo will edit the *American Medical Quarterly* to be published in New York.

Atlanta's municipality has passed a "spitting ordinance," prohibiting expectorating on the sidewalks and in all public places.

Dr. George B. McReynolds of the City Hospital is resident physician of the Presbyterian Eye, Ear and Throat Charity Hospital.

There are thirty-three candidates for graduation at the Johns Hopkins Medical School. The commencement will take place June 13.

The *Atlanta Medical and Surgical Journal* and the *Southern Medical Record* have consolidated to form the *Atlanta Journal-Record of Medicine*.

Plans are under way to consolidate all the springs at Saratoga under one management and build a sanitarium and make a large park.

Among the proposed changes of residence are that of Dr. J. M. T. Finney to 1300 Eutaw Place, and Dr. A. D. McConachie to 805 North Charles street.

James W. Koontz, who sued Dr. Joseph T. Jarboe of Smithsburg for \$10,000 damages for unskillful setting of the bone of his leg, was awarded a verdict for \$750.

Dr. Charlotte B. Gardner of Cumberland, who received her medical degree at the Woman's Medical College of Philadelphia, is said to be the first woman physician from Allegany county, Maryland.

At the commencement of the University and Bellevue Hospital Medical College of New York 162 candidates received degrees. Of these, twenty-nine, after competitive examinations, secured appointments in hospitals.

Dr. H. W. Wiley, chief chemist of the United States Department of Agriculture, declared recently before a senatorial pure-food investigating committee that fully 90 per cent. of the articles of food and drink manufactured and used in this country are frauds.

John Philip Sousa has made a contract to compose a march for \$5000 to bear the name of a medical article and to be used in its exploitation. The *Medical Record* suggests that it might not be inappropriate to set the march to the tune, "Tommy Make Room For Your 'Anti.'"

According to the *Medical News* for April 8, a Minnesota veteran, having given a public testimonial to a patent-medicine firm that its medicine has restored him to perfect health, is now trying to set himself right with the Pension Office, which proposes to take him at his word and cut him off the pension rolls.

Governor Roosevelt has signed an amendment to the civil code which forbids a physician to give any information concerning the mental or physical condition of his patients, either before or after the death of the latter. Hitherto the law has permitted a physician to testify concerning the physical condition of a person holding a policy of life insurance.

The faculty of the Woman's Medical College of Baltimore has elected Dr. Claribel Cone, president; Dr. Joseph T. Smith, secretary, and Dr. Herbert Harlan, treasurer of the faculty. Miss Jennie Browne was elected adjunct professor of physiology; Dr. A. C. Harrison, professor of physical diagnosis and clinical medicine, and Dr. Flora Pollack, associate professor in obstetrics. Dr. M. Augusta Waters was elected resident physician of the Good Samaritan Hospital.

Washington Notes.

Passed Assistant Surgeon W. F. Arnold has been granted two months' sick leave.

Capt. W. H. Wilson, assistant surgeon, now at Fortress Monroe, has been ordered to San Francisco.

Acting Assistant Surgeon R. H. Zauner has been relieved from duty at Camp Meade and ordered to San Francisco.

Lieutenant J. H. Ford, assistant surgeon, U. S. A., recently serving in the hospitals at Fort McPherson and at Savannah, Ga., has been ordered to San Francisco.

At the Washington Medical and Surgical Society Monday evening Dr. George C. Clark read the paper of the evening, subject, "The Physiology and Etiology of Skin Diseases."

At the District Medical Society Wednesday evening Dr. Robert Reyburn presented a paper, subject, "Can the Excessive Mortality from Acute Pneumonia be Reduced?" Dr. Lamb presented cases and specimens (1) Cirrhosis of the Liver, (2) Septic Pericarditis and Nephritis.

The fifteenth annual commencement of the Medical and Dental Departments of the National University will be held Tuesday, June 6. The address to the graduating class will be made by Prof. Millard F. Thompson, and the valedictory address by J. Kell Munroe. Graduates in medicine are S. B. Bain, C. K. Bartlett, E. L. Maddren and A. D. McKenzie. Graduates in dentistry, J. R. Armstrong, T. F. Baxter, C. P. Cullen, J. P. Devlin, Z. E. House, M. F. Kirwan, J. K. Monroe, J. B. North, W. B. Todd, L. E. Ward.

The Columbian University commencement exercises were held in Convention Hall Wednesday evening, May 31. Degrees were conferred upon 269 candidates. Of this number, twenty-seven received the degree of doctor of medicine, thirteen doctor of dental surgery, fifty-four master of laws, ninety bachelor of laws. Besides these, a large number received the degree of bachelor of arts and science and other branches of study, including civil engineering, electrical engineering, architecture, literature, mechanical engineering and master of patent law.

Book Reviews.

HIRST'S OBSTETRICS. A Text-Book of Obstetrics. By Barton Cooke Hirst, M.D., Professor of Obstetrics in the University of Pennsylvania. Handsome octavo volume of over 800 pages. Profusely illustrated. Philadelphia: W. B. Saunders. 1899.

Professor Hirst is so very well known both as an obstetrician and teacher of obstetrics that the title of this volume alone should be more than enough to insure its getting into the hands of the majority of specialists, general practitioners and students of obstetrics throughout the country. The work is an admirable one in every sense of the word, concisely but comprehensively written in a style which makes its reading more a matter of entertainment rather than the perusal of numerous dry facts and dogmatic statements. Frequent reference in the text has been made to the work of others, both in this country and abroad, but an apparent laudable effort has been made to avoid mentioning the long list of names and tedious recapitulation of literary productions, which, in the opinion of the author, only tend to confuse and complicate matters for the student. For that reason only the epoch-making articles have been referred to.

The illustrations of the book are in the main excellent, and although some of them cannot be said to come into the strict category of art, yet they have the advantage of bringing out the facts which the author wants them to show. Exception to this might be made, however, in the case of a few reproduced photo-micrographs which occur in the section of the placenta. Photo-micrographs may be accurate from the purely optical and scientific standpoint, but it is so very rare that one sees the reproduction of one showing what is claimed for it that it is with considerable regret that we see them, however few, in a publication possessing so many other advantages.

The author has divided his subject, Obstetrics, into the following sections: Pregnancy, Physiology and Management of Labor and the Puerperium, the Mechanism of Labor, the Pathology of Labor, Pathology of the Puerperium, Obstetric Operations and the New-Born Child.

In so short a review it is impossible to give this work what criticism it deserves, but, as a whole, we can say that the volume will be one of the greatest practical and scientific value to anyone interested in the practice of obstetrics.

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Original Articles.

JOHN HUGHES BENNETT.

HIS SERVICES TO MEDICINE.

By William W. Johnston, M.D.,

Washington, D. C.

READ AT THE CENTENNIAL MEETING OF THE MEDICAL
AND CHIRURGICAL FACULTY OF MARYLAND, HELD
AT BALTIMORE, APRIL 25-28, 1899.

ON an occasion such as this, the anniversary of an ancient and honorable medical society, nothing seems more appropriate than to review the memories of men who were recognized leaders in their time, and whose lives marked epochs in medical science.

No name stands out brighter in the beginning of the last half of the century than that of John Hughes Bennett. His life and work mark the beginning of a revolt, the birth of a new spirit, the dawn of a new era. It was the age when the advances in physiology, in chemistry, and, above all, in pathology, placed medical science in an attitude of opposition to much of its past, and created the demand for leaders of a new advance. Bennett was a sceptic towards tradition in medicine, a critic of all accepted faiths, a bitter hater of mysticism and error. He had the animus of the revolutionist, but he was a reformer as well. He destroyed only to build better.

In the limited time at my disposal it would be impossible to review in detail the events of Bennett's life. I can only dwell upon the chief features of his work and their value to science. But I cannot help speaking of the man.

Born in England in 1812, he became an articled pupil of Mr. Sedgwick of Maidstone at the age of 17. He entered

the University of Edinburgh in 1833, and graduated in 1837. Two years were then spent in Paris and two in Germany. Distinguished as a student by zeal and intelligence, he showed great activity in literary work, and soon after graduation wrote seventeen district articles for Tweedie's Library.

Teacher, Editor and Writer.—Returning to Edinburgh in 1841, four years after his graduation, he began at once a course of practical instruction in histology for the students of the university. One of his handbills issued at this time, fifty-six years ago, was as follows:

"Histology.

"Dr. Bennett during the summer session will give a public course of lectures on the minute structure of organized tissues, with reference to anatomy, physiology, pathology and the diagnosis of disease. These lectures will be illustrated with numerous preparations, diagrams and demonstrations under the microscope, the latter by means of twelve achromatic instruments of great power, manufactured by Chevalier of Paris expressly for this course. An introductory lecture will be delivered on Friday, May 13, at 11 A. M., in the classroom, Surgeon's Square, and the course will be continued every Monday, Wednesday and Friday at the same hour throughout the session; fee, two pounds two shillings. Dr. Bennett will also give private courses on the practical manipulation of the microscope. Each class is limited to six, and the time of the lecture regulated by the wishes of the majority. The lectures embrace the optical and mechanical arrangements of microscopes, illumination, mensuration, optical illusions, mode of displaying objects and every information necessary for the medical inquirer in his examination of the animal textures in a state of health

and disease; fee, three pounds three shillings.

"16 Pitt street, May 2, 1842."

The importance of this historical reference lies in the fact that up to this date there had been no systematic instruction in histology in England or in this country. Bennett was the first to begin a course of practical instruction in microscopical technology, and was, in addition to this, the first in England to apply the microscope to clinical diagnosis. Moreover, Bennett was a pathologist as well as a clinician and histologist. He early insisted upon the microscopical examination of diseased organs, and very much of the best original work done by him was in this direction.

On October 1, 1842, Dr. Bennett published a paper on "Cod Liver Oil As a Therapeutic Agent in Certain Forms of Gout, Rheumatism and Scrofula, With Cases." Although this oil had been spoken of as a remedy from 1789, and was used in Germany and among the fisher folk of the southern coasts of Scotland, it had not been generally used for phthisis pulmonalis. To Bennett we owe the beginning of the extended and firm faith in its curative virtues in this affection, and his name will always be connected with this special therapeutic application.

In 1842 he was an unsuccessful candidate for the chair of general pathology, but about this time he became a fellow of the Royal Society of Edinburgh, a fellow of the Royal College of Physicians of Edinburgh, physician to the Royal Dispensary, and, more important than these, pathologist to the Royal Infirmary. In connection with the dispensary he began a course of clinical lectures on the plan of the German Polyclinic. As pathologist to the infirmary he had that rare opportunity which, if it comes to a student of medicine in his career, proves of lasting and incalculable benefit. Bennett's whole line of work and thought so far had shown how clearly he saw that medical science and art were to be advanced only by the rigid observance of the facts of disease and by the careful recording of these facts, and he foresaw what wonderful aid the microscope would give to the finding of facts not otherwise discoverable.

It was during this period that he formed a museum of 1100 specimens, and gave six courses of lectures each winter on morbid anatomy and pathological histology, the special and novel feature of which was the demonstration under the microscope of morbid tissues. The students studied for themselves each separate specimen. From 1842 to 1848 he lived a life of incessant mental activity. For several years he was editor of the *Edinburgh Journal of Medical Science*, to which he was also a frequent contributor. Thirty-four papers appeared in its pages written by Bennett during these six years. They range over histology, physiology, pathology, medical and surgical therapeutics and natural science. This was original work, the result of his own observations, much of which has now become an intrinsic part of our knowledge. Among the titles of the papers are: (1) On the employment of the microscope in medical studies; (2) On the parasitic fungi found on living animals; (3) Pathological and histological researches on inflammation of the nervous centers; (4) Note on the structural changes of the blood in the hemorrhagic diathesis; (5) On the frequent spontaneous cure of pulmonary consumption and the indications furnished by pathology for its rational treatment; (6) Case of hypertrophy of the spleen and liver in which death took place from supuration of the blood.

This was that celebrated paper containing the first recorded case of leucocythemia and about which there was so much controversy. Undoubtedly Bennett was the first to describe a case of leukemia and to picture correctly the microscopical appearances of the blood in that disease. This he did in a paper published October 1, 1845. But it is also true that Bennett did not recognize the true nature of these blood changes. He spoke of it as true pus formed universally within the vascular system. To Virchow, in papers published in November, 1845, and later, is due the honor of having first understood the process to be one of an increase of the colorless cells of the blood, connected with disease of the lymphatic system. But the claim of the priority of discovery made by Bennett is justified by

the publication of the first careful description of the microscopical blood changes six weeks before Virchow's first published case.

The heated war of words which continued for some years between Bennett and Virchow and his partisans shows how much this title to priority was coveted. To Bennett, too, is due the suggestion of the term leucocythemia (white cell blood), which is much more expressive of the true pathology of the disease than Virchow's designation of "leukemia."

(7) "How Should Medicine Be Advanced" was the title of another essay, all of which, but for its length, I would like to quote here, as it gives a definite expression to some of Bennett's views, views that seem as pertinent now as fifty years ago.

Professor of the Institutes of Medicine.—This part of Bennett's life came to a close by his promotion to the chair of the Institutes of Medicine. In accepting the chair Bennett had in view the teaching of physiology by constant reference to the sciences of pathology and therapeutics. In other words, he proposed to be no mere physiologist, but to enforce the practical bearings of this branch upon those departments of medicine that were more immediately connected with the welfare of humanity.

This union of interests and aims was further strengthened by his appointment to the chair of clinical medicine and by placing under his immediate charge certain wards in the Edinburgh Infirmary.

The work of reorganizing the teaching of physiology in so conservative a university was not an easy one. But Bennett's vision carried him far beyond the well-trodden paths of his predecessors. His methods involved a complete revolution in the plan of teaching. With the microscope and other instruments of physical research, which science and mechanical genius had recently introduced and improved, he carried his pupils into entirely new lines of investigation.

There were three separate courses carried on simultaneously by himself and not simply under his direction. These were:

1. Histology and practical instruction with the microscope in the laboratory.

This demanded several hours a week, as each man was taught individually in classes of 20 to 30.

2. A laboratory course in experimental physiology, with demonstrations as to the use of modern physical instruments.

3. A course of lectures on physiology covering the entire winter from October to April.

In teaching histology he drilled his classes in the use of the microscope until every man knew his instrument as a trained soldier knows his rifle, and until in the handling of it he was as perfect as the veteran in the manual of arms. At the word "Microscopes out" there was a hurried movement of hands, and in a moment everyone was ready for the expected lesson. His system was to let every man make every section for himself, see for himself the object prepared, and describe it in his own words; these words must be carefully chosen so as to give a correct picture of the cell, tissue or organ seen. Nothing but accuracy would suit his exacting demand, and woe to the unhappy pupil who attempted to describe what he did not see, or whose words were ill-chosen or inappropriate. The student soon learned a lesson in the art of observation and in the meaning of words in the English language that he was not likely ever to forget. A system like this developed in the student the art of seeing, of letting nothing escape the eye, and of transforming these sense objects into accurate and appropriate language.

Teacher of Clinical Medicine.—But it was in the wards of the Royal Infirmary, as professor of clinical medicine, that Bennett sat on a throne. Here he was *facile princeps*. The leading idea in his plan was to teach the student method—method in the correct observation of facts and in recording them, and in the drawing of deductions from them. He taught the art of arts, that of clear thinking. The student, after an examination of the case in the presence and under the criticism of the class, was required to describe the symptoms, to define the organ affected and the nature of the lesion. From this he passed to the deduction, the diagnosis and the reasons therefor.

Precision in method and in language was insisted on. Bennett excluded everything that was unnecessary to reach a conclusion, and the histories of cases as he wrote them and taught them to be written were models of condensation. He was, however, a hard taskmaster, and the discipline of his class was to some irksome in the extreme. The habit of using uncertain or obscure words he was especially severe upon. If the luckless student said the patient "seemed to have a fever," "What!" he would say, "Has he a fever or has he not? Seems to have means nothing." He would grow very much excited if the statement was made that the pulse was "about 120." "It is 120, or is not?" he would exclaim. "Why do you say 'about?'" One can readily see how such a method made students accurate, painstaking and efficient in the examination and diagnosis of disease. And it is one of the highest tributes to Dr. Bennett that, after his death, letters came from all over Great Britain and elsewhere, written by former pupils, expressing their appreciation of the value of his teachings, and saying that their success was largely due to his influence. Dr. Andrew Clarke of London said in an address when the bust of Bennett was presented to the university: "I was once his pupil, and for a long time his assistant in the pathological department of the Royal Infirmary. From him I got not only knowledge, but the love of work. He laughed me out of my youthful conceits, provoked me into perseverance and drilled me into habits of exact observation. To the habits of thought and work begotten and established under the influence of Dr. Bennett's teaching and example I owe, in great part, such success as I have had in life, and I rejoice in this opportunity of making grateful acknowledgment of what I owe him." Such was the universal testimony.

During this period of his life, after he became professor of the Institutes up to the close of his active work, he continued to contribute to the journals and to write books. The journal articles numbered sixty during these years, and seven volumes were printed, the largest, of 1020 pages, being his work of clinical lectures

on the principles and practice of medicine.

Treatment of Pneumonia.—Bennett saw early in his professional career that the treatment of pneumonia was not based upon a true knowledge of the pathology of the disease; that it was a system, the actual results of which had never been collected and analyzed. But he was slow in coming to a final conclusion, and it was not until he had observed and treated pneumonia for sixteen years that he gave out his complete argument, based on the accumulated facts and experiences of that period.

On January 2, 1857, he read a paper before the Medico-Chirurgical Society of Edinburgh, entitled "Observations on the Results of an Advanced Diagnosis and Pathology, Applied to the Management of Internal Inflammations, Compared With the Effect of a Former Antiphlogistic Treatment and Especially of Blood Letting." This paper excited great discussion, in which all the leading physicians took part. Controversial papers appeared on the subject from the pens of Professors Allison, Gairdner, Sir Thomas Watson, Laycock and others. To all of these Bennett replied, and in support of his contention he published other papers on the same subject, his complete work on pneumonia appearing in 1866.

His argument against the antiphlogistic treatment of pneumonia was based upon his personal study of the pneumonic lung and his observations of the symptoms of the successive stages of the disease, uninfluenced by treatment, in its progress towards recovery. His words are as follows: "If the resolution of a pneumonia simply consisted of a retrograde process—of a so-called necrosis of the exudation—an antiphlogistic practice, by favoring it, might be expected to relieve the lung rapidly and cure the disease. But my conviction that such removal was dependent upon vital processes of growth led me to an opposite treatment, viz., never to attempt cutting the disease short, or to weaken the pulse and vital powers, but, on the contrary, to further the necessary changes which the exudation must undergo in order to be fully

excreted from the economy." (Pneumonia, page 52.)

Those who had accepted and employed treatment by bleeding were not spoken of harshly. He attacked errors sometimes with headlong impetuosity and rarely left much of his adversary's argument, but individuals he treated with courtesy. In one place he says: "I believe that former physicians were thoroughly conscientious and acted in perfect harmony with the pathology of their day, and the then state of knowledge. But now that pathology has greatly advanced, and our knowledge has been correspondingly extended, it only becomes us, instead of remaining slaves to the authority of our forefathers, to imitate them at least in this, viz., to bring our theory and practice in harmony with each other. My real purpose has been to demonstrate that our acquaintance with diseased processes has led us to a treatment which has greatly diminished the mortality of acute inflammation, and if I have succeeded, I shall rejoice that the end has been obtained, while I regret that such eminent physicians as Drs. Allison, Christison, Watson and Stokes have differed with me in opinion."

The mention of these eminent names among his opponents shows with what odds he had to contend and how serious was the opposition to the new doctrine. Indeed, he had the world against him then and after. As late as 1864 no marked effect had been produced by Bennett among the practitioners of medicine.

In addition to the arguments from pathological anatomy and the study of the natural history of the disease, Bennett published a table of 125 cases, each one of which had been carefully and publicly examined by him personally in the wards of the infirmary. In each case the diagnosis was accurately made, every symptom and physical sign being noted. There was no point omitted that could leave a loophole for the objector as to the correctness of the diagnosis.

Bennett's figures show that from 1841 to 1848, when the treatment by bleeding and antimony was alone employed, one death occurred in two and three-quarters of the cases of pneumonia. From 1848 to

1856, when the "restorative plan" was introduced, the mortality was reduced to one death in four and one-half cases; from 1856 to 1865, under the same plan, one death occurred in seven and three-quarters cases; nearly three times as many cases recovered under the new treatment as under the old.

Such results startled the world, and especially the Edinburgh world. Bennett's honesty and skill in diagnosis left no doubt as to the nature of the cases treated, and therefore he was not accused of manipulating the figures to suit his ends.

It soon came to be an admitted fact that patients died because they were bled, and got well because they were treated on the "restorative plan." But although the fact was granted as to the patients of Bennett's day, it was for a long time claimed that in former days, before his time, bleeding was useful and did save life.

Sir Thomas Watson offered the change of type explanation, which became current at the time. His words are these: "I am fully persuaded, by my own observations and by the records of medicine, that there are waves of time through which the sthenic and asthenic characters of disease prevail in succession, and that we are at present living amid one of its adynamic phases." Bennett attacked this argument with great skill, but he himself unwittingly admitted the truth of the statement when he says: "The morbid poisons in the atmosphere arising from various sources are more powerful at one period than at another, and not only induce symptoms varying in intensity, but cause varied symptoms, such as occur in typhus and typhoid fevers. It is the latter change which constitutes difference in type." When Bennett wrote this he did not know that pneumonia would, in another thirty years, be classed with the infectious fevers and be traced to a micro-organism. His prescience of the infectious nature of pneumonia is remarkable.

The line of reasoning followed in this propaganda against venesection was also opposed to the faulty methods by which faith in any plan of treatment or in any drug is created and sustained, and to the hasty deduction from statistics to prove

the value of any therapeutic system. His words on this point are very emphatic. He says in one place: "A still more important lesson, however, may be derived from this discussion, viz., that in medicine no sound conclusions can be drawn from the glowing description of a few cases in illustration of any treatment whatever. Sober facts, well attested and tabulated, are what we require, with all the leading phenomena of the disease accurately observed and recorded. More especially is it necessary for arriving at truths to give a series of cases in which the failures, as well as the successes, are considered, avoiding all assumptions and rhetorical efforts, and depending alone upon the completeness and exactitude of detail." "On no subject," he continues, "does the contradictory character of medical reasoning become more apparent than in that of medical statistics, because while every practitioner is constantly endeavoring to prove his treatment to be successful, he regards with aversion everything that reminds him of failures. How common also is the tendency to ascribe recoveries to medical skill, while the deaths are referred to the inevitable progress of the malady. Although philosophical physicians have at all time pointed out the fallacy of these beliefs, they still hold almost universal sway over the medical profession. It must be admitted that mere assertion and opinion are altogether incapable of determining any question whatever in medical practice. Our object should be not to dispute about what we think or believe, not what may, could, would or should be, but what is."

Personal Characteristics.—Bennett was tall, and in early life was pale, and had long, dark hair. He did not grow stout with age, but was always slender and active in his gestures and movements. In the lecture-room he sat the personification of intellectual force, his eyes keen and flashing, his expression grave or gay, as his subject demanded. His words were measured, eloquent and fit, and in every sentence gave examples of the precision of the methods that he wished his students to acquire. The didactic lectures on physiology were delivered in a large classroom, the professor being seated, wearing

his academic gown. His lectures were all written, but never read, and they seemed to be extemporaneous, yet the nature of his mind and his craving for accuracy made him commit each thought to paper. Every night before a lecture he read it over in his home, and he was often heard talking science to the empty drawing-room long after the family had retired for the night. His manner of speaking was marked by elegance and emphasis, and his array of facts and arguments was perfect in accurate statement and logical arrangement. Facts and figures were invested with all the charm of literary and artistic skill, for Bennett was artist also, and with chalk and blackboard could make clear the most difficult parts of his subjects. His lectures, too, were profusely illustrated with colored plates and drawings.

What I have said would be incomplete if I failed to show Bennett from another point of view. He was devotedly fond of music and evinced the greatest interest in the musical education of his children. The annual dinners of the Royal Medical Society, where he was invariably an invited guest, were always enlivened by an original song (it was usually a comic one, hitting off the foibles of the day) by the professor of the Institutes. He was, moreover, a great reader of general literature, and this love, as well as a tendency to insomnia, led him to having a bag full of books at his bedhead every night filled with heavy or light literature, as the fancy seized him. At one time he read Cooper's novels through and talked of nothing but La Longue Carabine and those other heroes and heroines who have charmed our youthful imaginations. He was devoted to poetry and to Shakespeare, and could recite long passages with the greatest effect. At other times he would discuss religious questions with seriousness, but with much of the critical spirit that marked his thought in other lines. It mattered little what the subject or the occasion, his clear and comprehensive intellect had a keen and trenchant quality that fascinated all who heard him.

Conclusion.—Much more might be said of other lines of Bennett's work, some of which are more interesting historically

than the few selected. The chief features of his arduous life may be summed up as follows:

1. He was the first to begin systematic instruction in microscopical technology and histology in an English-speaking university.

2. He insisted upon the great value of the microscope in the detection of diseased processes at a time when but little attention was paid to this mode of study. In this direction much of his best work was in connection with diseases of the nervous system. His publication entitled "Pathological and Histological Researches on Inflammation of the Nervous Centers" is said to be "the first positive addition to our knowledge of nervous diseases by means of the microscope."

3. He was one of the first to use the microscope for chemical diagnosis, and was a pioneer in the recognition of disease by blood examinations, the first recorded case of leukemia being described by him.

4. He revolutionized the treatment of pneumonia.

5. He was an iconoclast, destroying idols and warring with persistent delusions and useless dogmas. Much of his life was a battle in which blows were given and taken, but the influence of Bennett's teaching and the example of his accurate clinical methods have had a far-reaching and prolonged influence in England, and, above all, in this country.

PRACTICAL HINTS ABOUT HERPES ZOSTER AND ITS TREATMENT.

By J. Abbott Cantrell, M.D.,

Professor of Diseases of the Skin in the Philadelphia Polyclinic and College for Graduates in Medicine; Dermatologist to the Philadelphia Hospital, the Frederick Douglass Memorial Hospital and the Philadelphia Medical Mission, Philadelphia.

HERPES zoster, in its cutaneous manifestations, does not entirely limit itself to following the course of one nerve. It may either follow one nerve in its major portion or proceed to its smaller branches and through these be carried to an adjacent nerve or set of nerves.

These facts may be presented in cases of pectoral zoster wherein one dorsal nerve and its intercostal branch may alone be affected, or when, through collateral branches, several intercostals may show the irritation, although the dorsal or main trunk may not be affected by the inflammation, or it may be by a subsequent contamination. A like example may be taken from brachial zoster where extension of the condition follows through collateral nerve elements. Although the above facts bespeak the characters of procession, they cause no change either in the kind of manifestation presented or the feelings exhibited by the affected person.

According to personal observation this cutaneous disease presents the greater number of cases during the months of August, October and November. The white race contributes about eighteen times those of colored blood, while males are affected slightly more frequently than females. Indoor work seems to influence the number of cases more often than does outdoor occupation, although probably this may be through careless attention to dress when occasion demands passage from home circles to place of business. The greater majority of cases are shown between the ages of ten and thirty years, the pectoral region presenting the larger frequency and the left side of the body more often than that of the right.

It has been found that pain does not follow any general rule in the manner in which it is presented, as we often notice that cases of zoster pass entirely through their course without giving any distinct feelings of distress, while at other times they may cause excruciating pain before, during and after the disappearance of the eruption. Pain is often manifested previous to the outbreak of the eruption, disappearing upon the occurrence of the lesions in one set of cases, while in others this symptom only present during the existence of the eruption or may only appear after the disappearance of the cutaneous outbreak. Ophthalmic zoster is usually accompanied with distressing pain throughout its existence and often causes severe disfiguration either upon the skin itself or causes some disturbance of the

eye function, such as disturbance of vision or loss of sight entirely.

The lesions encountered in zoster are usually vesicular in type, although they may become vesico-pustular; they rarely rupture spontaneously, but often, through friction, may suppurate and ulcerate. The diagnosis of zoster should offer little, if any, difficulty if one will take the character of eruption, its course along a nerve and the occurrence of pain into consideration. The lesions, vesicular in type, are discrete, although closely aggregated, and each, as well as the entire group, is surrounded by a pinkish-red areola. The prognosis is always favorable except in the ophthalmic variety, when disfigurement may ensue.

In treating this affection it is seldom necessary to use extreme measures, as the mildest remedies often suffice to bring about an early cure. In extreme cases it may often be necessary to apply more powerful medicaments to alleviate pain and discomfort as well as limiting the amount of disfigurement or loss of function. While it has been asserted that abortion of an attack is never accomplished, this fact carries with it the feeling that such an attempt should be exerted in behalf of the affected individual. External measures should be directed towards the prevention of friction and its consequent effect upon the rupture of the small vesicular lesions. If the vesicles are allowed to rupture the amount of pain is greatly enhanced in extent and degree, and where pain was not previously present it soon is manifest.

Internal remedies are called for in those types of extreme depression, as may often be observed in the ophthalmic variety. Other forms often demand the use of internal treatment when the affection is witnessed in those especially of nervous temperament. When the condition is observed in those of tender years or of advanced age it may be deemed advisable to contravert shock with strengthening measures.

External Treatment.—In the milder types of herpes zoster the writer has frequently received excellent results from one of the following applications:

℞ Bismuth subnitrate, ʒi.
Petrolatum vel Ungt. Zinci Ox.,
ʒvii. M.

S. Apply directly to affected areas thrice daily.

℞ Salolis, ʒss-i.
Etheris., ʒi. M.

S. Apply with brush directly to lesions once, twice or thrice during the day.

℞ Morphiae sulphat., gr. i-ii.
Lanolin, ʒi. M.

S. Apply several times daily.

In applying any of the above-mentioned formulae it is especially advisable to see that the parts are well covered and that immediately upon the dressing pieces of linen are arranged so that friction or pressure does not take place. If care is not exerted to limit the amount of harm that may arise the case may become complicated with suppuration or ulceration, and hence disfigurement even in the most mild of cases.

In cases of extreme degree, where pain is excessive, whether this occur in one type or another, it will be demanded to give the more strenuous measures. In some of these extreme cases the slightest amount of pressure, whether exerted by the clothing or by a camel's-hair brush in applying medicaments, causes the direst distress. In those of especially nervous temperament even close proximity causes tension from fear of touch.

The following may be found serviceable in these types:

℞ Collodion, ʒi.

S. Apply by camel's-hair brush directly over the lesions three or four, or more, times daily. (Do not remove at each dressing, but apply over former painting.)

℞ Ichthyol, ʒiv.
Aqua, ʒiv. M.

S. Paint with camel's-hair brush thrice daily.

In some cases applying cloths soaking wet with the above application gives a better result. In some very extreme cases the use of ichthyol in full strength every six hours gives the greatest benefit. In cases where pain is excessive the writer has often advised the following with benefit.

- ℞ Morphiae, gr. i-ii.
Collodion, ℥i.
Applied three or four times a day.
- ℞ Acetanilide, gr. xv-xiv.
Etheris., ℥i.
Apply thrice daily.

One of the above-mentioned formulae will give the desired result in almost any case that may present itself, and it is only occasionally that cases arise that they will not relieve. The strength of each may be increased when occasion demands such procedures.

Internal Treatment.—Probably in the milder cases of herpes zoster it may only be necessary to give some slight sedative to the nervous system, such as bromide of potassium, in doses to suit the age and temperament. Often when the patients are somewhat lowered in vitality it may be advisable to give small doses of arsenic, such as three or four drops of Fowler's solution, thrice daily or one-thirtieth grain of arsenious acid in like doses. In those who are greatly run down and have not the power to withstand discomfort it will often be advisable to use either iron or strychnine, or both, in combination. Quinine, phenacetine and acetanilide may often be deemed necessary in certain nervous people. Other forms of treatment, bearing upon the same direct line, will give similar results.

EPITHELIOMA (SKIN CANCER) TREATMENT.

By A. D. McConachie, M.D.,

Assistant Surgeon to the Presbyterian Eye, Ear and Throat Charity Hospital; Ophthalmologist to Bay View Hospital, Baltimore, Md.

READ BEFORE THE UNIVERSITY OF MARYLAND MEDICAL SOCIETY. MARCH 21, 1899.

CANCER in former times was regarded as a tumor which began as a hard nodule and later was changed into the cancer nodule proper, undergoing fungous proliferation, then ulceration, and finally resulting in death by general marasmus (cancer cachexia).

After many changes in theory our present conception of cancer has been arrived at, due largely to the researches of Roki-

tansky, Billroth, Thiersch, Remak, Förster and Virchow. From their investigations we are now able to define cancer as a malignant neoplasm which consists of a proliferating epithelial cell mass, arranged in an alveolar cone-like or tube-like manner, together with a connective tissue stroma in a condition of inflammatory infiltration. This definition applies to epithelial cancer, to which epitheliomata belong, but does not apply completely to some other forms which cannot be included in a general definition.

Clinically an epithelioma may be divided into (1) flat, (2) nodular or deep-seated, and (3) papillary and located on the skin or mucous membrane.

The flat form may begin as a vesicle, papule, wart or nodule, or as an eczematous-like lesion. They soon excoriate or fissure spontaneously or by scratching, and are then covered with a crust of viscid secretion and blood. It may take several years before this stage is reached. The focus then enlarges and new nodules or papules develop at the margins. These nodules are made up of epithelial cells (round, spindle-shaped nucleated cells) arranged around a central mass, the whole being known as cancrioid corpuscles or spheres or pearl bodies. Exfoliation proceeds until a large area of ulcerated surface, with base and edges hard, and strewn with pearl bodies, which may heal at the end of years, or, as is usual, new foci appear, rarely producing any bad effect upon the general system or enlargement of neighboring glands. It may be converted into the deep-seated or nodular form; the latter, however, usually begins as a primary affection.

The papillomatous variety runs the most rapid course. It appears as a broad, hard tumor, or is pedunculated like a mushroom and projects from the surface of the skin.

Epitheliomata spread not by centric growth, as is the case with simple tumors, adenoma, lipoma, etc., but by growth peripherally and invasion of the surrounding tissue by way of the lymph channels, so much as not to be recognized by touch or the unaided eye. Even a microscopical examination may not detect the migrated epithelia, as is so fre-

quently shown by recurrence after excision of the entire diseased area. A knowledge of the form, direction, location and rapidity of the growth of the cancer is of great value in judging as to the possible extent of the invasion, and should be carefully noted in every case in order that the disease may be thoroughly removed, and still avoid unnecessary destruction of normal tissue. Yet thorough removal is necessary, as partial removal is not only not beneficial, but actually harmful, as it hastens the growth of the tumor and favors secondary lymphatic gland infection, when the disease can then be considered incurable.

Skin cancers (all forms) occur most frequently upon the face, chiefly the eyelids and adjacent parts, skin of the nose (bony and cartilaginous), the lips, lateral parts of the cheek and forehead. The eyelids, temples and bridge of the nose are often covered for years by flat apitheliomata, and may extend to the cheeks, lobe of the ear and upper lip, or may extend to the conjunctiva, thence into the orbit, without involving the eyeball for a long time; from the lips it may extend to the buccal mucous membrane and extend to the hard palate, involving the bone in degeneration, producing perforation of the hard palate, loss of teeth and alveolus, perforation of the antrum of Highmore, the frontal sinuses, the cranial bones and exposure of the brain. Other portions of the body may be the seat, as the genitalia, upper and lower limbs. Cancer of the tongue and mucous membrane is much more frequent.

The cause of cancer in general is still obscure. In epitheliomata certain local, acquired or congenital histological conditions of the skin furnish the exciting cause for its development as soon as a change in the nutritive relations between the papillae and connective tissue stroma on the one hand and the rete and pigment on the other. Among such conditions we may mention warts, which undergo epithelial proliferation either spontaneously or by irritation from tobacco juice or mechanical irritation.

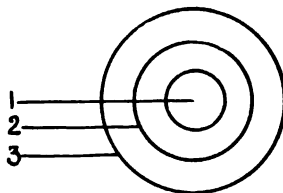
The diagnosis is readily made from the symptoms except in certain locations, and then may be mistaken for chancres

or tuberculous lesions, in which cases anti-syphilitic treatment or histological examination will be required.

The prognosis of epithelioma of the skin is more favorable than that of all other forms of cancer in any locality. Cancer is at first a purely local disease and not a manifestation of a constitutional condition, hence a thorough removal, before it has invaded other parts, of the growth is equivalent to a cure of the disease.

Treatment.—Our object should be to thoroughly remove all tissue involved with as little scar and deformity as possible and the least amount of destruction of normal tissue. Our choice of agents lies between the knife and destructive agents—caustics, thermo- or electro-cautery.

In parts of the body, as the scrotum and front parts of the neck, where it is possible to remove large amounts of tissue without injury to the patient, undoubtedly the knife is the best agent to use. My work in epitheliomata being confined to those of the skin about the face, brow, eyes, lips, nose and ear, I am convinced that caustics are the most suitable and should always be employed in preference to excision on account of the greater certainty of success and the slighter deformity remaining after the removal of the diseased area. This, I think, can be made apparent by the illustration.



Should we have an area (1) of epitheliomatous skin (clinically); around this as far as (2) we may find or suspect a few migrated apitheliomata epithelia with some inflammatory infiltration, and beyond this to (3) with still a few migrated epithelia, and beyond (3) healthy tissue. If we use the knife it would be necessary to remove all the tissue within (3) or the disease would recur, and at the same time much mutilation of the face and much tissue must be removed. If we use caustics for the purpose, and one of sufficient

intensity, the diseased area within is destroyed, also the epithelia in the areas (2) and (3) as the action of the caustic extends beyond the necrosed area by an intense inflammatory process which leads to destruction of all the tissue within (2) and of the cancer epithelia in (3) without destroying the normal tissues, as pathological tissue is more affected by caustics than normal tissue.

Thus we get the equivalent results of the knife, but the open wound with caustics only extends to (2) and with the knife to (3). Herein lies the advantage of the caustic over the knife. Mild caustics, as carbolic acid, nitrate of silver, hydrochloric, sulphuric and acetic acids, are slight in action and too slow. Their use only destroys a portion of the growth at one time, and the remainder is so stimulated that its reaction hastens the growth and may, by metastases, favor secondary lymphatic gland involvement. The stronger caustics, as caustic potash, chloride of zinc and arsenious acid, are preferable.

Caustic potash is rapidly destructive even of healthy tissue and should be used only when small diseased areas are involved, as severe hemorrhage may follow when large areas are destroyed. It can be used in solution, stick or Vienna paste (equal parts of potassa and lime in paste). Chloride of zinc can be used in solution, or, what I prefer, in collodion, or may be used as a paste combined with a local anesthetic. Arsenious acid in the form of Marsden's paste (two parts acid to one of gum acacia) or some modification (in strength) thereof I consider the best agent in treating skin cancer of the face. It has but comparatively slight action on normal tissue. In any case where the papule or nodule is unbroken we should curette the surface before applying the paste. The paste should cover sufficient area to be destroyed so as to be sure that the entire area involved in proliferated epithelia is incorporated in the destructive action of the paste. It should be left on for twelve to twenty-four hours, to be renewed if evidence of any growth remains; the strength of paste, length of time to be applied and number of applications to be regulated by the demands of

the case. Too much destruction of normal tissue should not be allowed.

My habit is to apply the paste with collodion, which readily dries, leaving a crust, and requires no adhesive plaster or bandage to keep it in place. Pastes when applied in the region of the eye are apt to become moistened and run to neighboring parts through excessive lachrymation; in such cases the collodion paste militates against this, being impermeable to moisture. The collodion paste crust should be removed at the end of twelve to twenty-four hours and the effects noted, and if the desired results have not been obtained, it should be reapplied, possibly reduced in strength. Our guide is the effect upon the tissues. When sufficient destruction is had the wound is to be treated simply, and no attempt made to heal it antiseptically, as the ptomaines and toxins from pus organisms and the inflammation are of service in helping to destroy the epitheliomata epithelia, and the needful granulation tissues quickly restores the part to normal. Caustics should not be used too timidly. Physicians frequently err by not using the agents sufficiently freely until the disease is removed. When effectively used I am sure that the operator will soon conclude that an epithelioma is not so dangerous a disease as it is usually thought to be.

In cases where the epithelioma involves structures whose entire removal is impossible, as in conjunctival or orbital involvement, palliation is possible by a dusting of orthoform, being nontoxic, anesthetic and slightly antiseptic. I am quite sure, if judiciously used, we have in the caustics, especially potassa, chloride of zinc and arsenious acid, the most effective agents for the cure of epithelioma with the least amount of deformity and scarring, with the greatest certainty of permanent destruction.

The use of electricity and the Paquelin cautery should not be relied upon, especially when large areas are involved. The use of erysipelatosus toxine has not proven satisfactory. Internal medication, by making a profound impression on the general nutritive condition, may slow the growth of the cancer, but in time the cancerous cause adapts itself to the new environments and reasserts itself.

Society Reports.

ASSOCIATION OF AMERICAN PHYSICIANS.

FOURTEENTH ANNUAL SESSION, HELD AT WASHINGTON, D. C., MAY 2, 3 AND 4, 1899.

THURSDAY, MAY 4—THIRD DAY.

Drs. F. Pfaff and J. J. Putnam of Boston read a paper on "Experimental Research Disproving the Theory That Paraxanthin Poisoning Is a Case of Migraine." As a preliminary explanation Dr. Putnam referred to his work done several years ago on this subject, and said they had collected five cases of typical migraine and seven cases of epilepsy. The results were uniform and agreed with former results. The analyses were made and took weeks and months, and the necessity for procuring four liters of urine from each one may explain the small number of cases. Dr. Pfaff then explained the chemical examination of the urine and showed how the xanthin was to be separated from the paraxanthin. The urine should be passed during and after an attack of migraine. He does not think that migraine is caused by paraxanthin.

Dr. Rachford said that he depended on the physiological as well as chemical tests for the results. He explained his method and said he believed in the physiological test and said it was leucomain poisoning. He spoke of the poisonous fluids from a migrainous case. He spoke of the ammonia compound of the xanthin group and the instability of the liver as affecting these fluids. He suggests remedies to affect the liver and intestinal canal.

Dr. C. A. Herter said it was clear that many opposite opinions were held on this point. Persons should have great experience to draw conclusions in this matter. Those that contend that migraine depends on the presence of paraxanthin must prove this.

Dr. Pfaff in reply to Dr. Rachford said that if the toxicity of the final fluids depended on the ammonia product of paraxanthin, one could prove this by experiments on animals by using fixed quan-

ties. He had injected 70 c. c. into a rabbit and he did not show the least discomfort.

Drs. F. Forcheimer and R. W. Stewart of Cincinnati read a paper on "The Toxicity of the Urine." He injected fresh urine into a mouse and it died. The shock may have killed it. The same urine boiled did not kill. When filtered it did not kill, and when boiled and injected the results were not uniform. When boiled and kept it became more toxic the longer it was kept. The addition of boric acid had no effect. Urine kept a long time will kill all mice. There were many errors, but these methods which excluded bacteria kill almost not at all. We are not justified in saying that the bacteria are not the only poisonous element in the urine. He referred to a former paper in which a faulty method was used. His experiments seem to show that the views heretofore held in regard to the toxicity of the urine are erroneous.

Dr. T. M. Rotch of Boston reported "A Case of Perforation of the Stomach by a Foreign Body in an Infant Seven Weeks Old." An infant was attacked suddenly with abdominal pain and vomiting. Symptoms of peritonitis developed. Laparotomy was done. The infant died, and in the stomach wall was a small perforation in which there was a thread.

Dr. F. H. Williams of Boston spoke of "An Aneurism and the X-Ray." A small aneurism was not made out by auscultation, but the x-ray showed it, and the autopsy showed the value of the x-ray.

The other papers were read by title.

The following officers were elected: President, Dr. E. G. Janeway; vice-president, Dr. William H. Welch; recorder, Dr. I. Minis Hays; secretary, Dr. Henry Hun; treasurer, Dr. J. P. Crozer Griffith; councillor, Dr. Wm. T. Councilman.

The following new members were elected: Honorary membership, Dr. Israel T. Dana of Portland; active membership, Drs. J. B. Thacher, Walter B. James, Wm. H. Park of New York; R. C. Cabot, Morton Prince, J. H. Wright of Boston; John S. Ely of New Haven; L. F. Barker of Baltimore; W. G. Johnston of Montreal.

Correspondence.**THE MEDICAL PROFESSION AND
"THE EXAMINING OPTI-
CIAN."***Editor of the Maryland Medical Journal:*

The following circular letter has been sent to oculists generally through the country:

"PHILADELPHIA, May 26, 1899.

"DEAR DOCTOR—The following resolutions, presented by Dr. Louis J. Lautenbach of Philadelphia, Pa., and supported and seconded by Dr. S. S. Towler of Marionville, Pa., were unanimously adopted by the Medical Society of the State of Pennsylvania on Wednesday, May 17, 1899, at Johnstown, Pa.:

"*Resolved*, That it is the opinion of the Medical Society of the State of Pennsylvania that opticians are not qualified by their training or are they legally qualified to perform the work of the oculist, and they should not be the consultants of regular physicians. Further, it is

"*Resolved*, That all physicians are requested to call their brother-physicians in consultation, thus discountenancing the growing pretences and assurances of the optician and his brother, the graduate optician, or, as he is beginning now to call himself, the "ophthalmotrician."

"It is the purpose of the undersigned to present similar resolutions substituting 'American Medical Association' for 'Medical Society of the State of Pennsylvania' for adoption by the American Medical Association at Columbus on Tuesday morning, June 6, 1899.

"It is hoped that you will in every way possible promote their passage, that you will vote and work for the same if present at the meeting, influencing your friends, who expect to attend, to do the same, and it possible send the resolution as passed by the Medical Society of the State of Pennsylvania to such medical journals as you think will best promote the purpose intended, with the view of having them present this matter in their editorial columns. I am, yours truly,

"LOUIS J. LAUTENBACH,
"1723 Walnut street."

A glance in the advertising columns of

a daily paper or at the signs in street cars shows how rapidly "free examiners" multiply. Many questions suggest themselves. Are these examinations really "free?" If one will take the trouble to neutralize glasses sold at one of these places, inquire the price, and then compare the price of the same glass when furnished on an oculist's prescription, it will be found that in the latter case the charge is nearly, if not absolutely, always less. But this is not the worst of it. The case-book of any oculist of large practice will furnish many such blunders as the following, culled by observation from among the former patrons of the "free" examiners: Concave lenses on hyper-tropic children, overcorrection of myopia, strong concaves on myopes with defective acuity of vision—a most dangerous error—neglect of astigmatism, or the cylindrical correction in a compound glass of a small amount, which is often purely subjective, adding, it may be remarked, greatly to the expense of the glass; glasses on eyes still preserving some sight, but dangerously diseased, giving the patient very little help and a false idea of security until, possibly, too late to remedy the trouble; prisms, when the real trouble is paresis of an eye muscle dependent upon a central or peripheral lesion. The unnecessary use of glasses in childhood is also to be mentioned as one of the sins of the "free" spectacle-sellers. A child can have headache and pain on studying, and there can be a co-existent astigmatism or hyperopia, readily detected by subjective tests, and yet the correction of the refraction error be neither necessary nor effective. Faulty habits of life, errors in diet, sleep, exercise, pushing a child's eyes beyond their working capacity, uncongenial school surroundings in a certain class of children—these are only some of the factors which a careful oculist has to consider in ordering correcting lenses, and their rectifying sometimes does away with the need of glasses. But when the examination is "free," and there is no fee if no sale, is it probable that the examiner will carefully weigh the various methods which might save him from putting on a pair of lenses with handsome gold frames?

Does the examining optician do harm? If by this is meant is it never safe for one to select a pair of glasses without consulting an oculist, the answer must certainly be that in many instances glasses bought over the counter do not injure the eyes. There are too many persons with excellent sight who have been doing this thing for years to justify the claim that opticians never give correct glasses. Again, it is urged that when a difficult case presents itself the patient is sent to some chosen oculist, who, in turn, sends his patients to this particular optician. Who is to judge when a case is difficult? Is the examining optician? If so, does he judge impartially and correctly? So far from becoming more conservative with the increased knowledge about the significance of refraction errors, and greater public realization of the necessity of watching the eyes and their defects, opticians seem to be getting bolder—to be stretching out into territory demanding the highest type of medical judgment. Such blunders as have been mentioned illustrate. Sometimes nature uses the conservative influence of pain to secure relief, but not infrequently this is wrongly interpreted by parent or family physician, and only drugs or more experiments at the optician's result. Again, deceived by the fact that the glasses seem to give "sharp" vision," the child goes on until destructive organic lesions come.

A remedy for the optician abuse is of great importance. Admitting that in some cases—for instance, simple presbyopia—one may select the proper glass (though he usually overdoes it), and that in a small proportion of cases of more serious trouble the examining optician "hits it," there is conceded to this gentleman all to which he is entitled. The word "free" is much more attractive to an unenlightened parent than the same word with the "r" omitted. There is a deep and time-honored conviction that, after all, one knows when a glass suits him, and that the subjective is the final test; hence no professional opinion is necessary. To correct these ideas by education of his patients is the duty of the family physician. He can do it better than the oculist, for the latter only reaches

those who consult him, and, as a rule, these know the truth already. Are physicians themselves alive to the extent of the abuse in question? Do they appreciate, as they should, the facts that the eyes, like other organs, have blood-vessels and nerves and important reflex functions, and are not merely visual machines; that when they are out of order, or are apparently causing remote disturbances, it is not merely a question of buying a pair of spectacles, but one of careful and painstaking diagnosis? Dr. Lautenbach is right in starting the correction of the optician abuse in the general profession. His resolution deserves hearty support. It ought to pass the American Medical Association and receive the careful attention of family physicians who are called upon not infrequently for advice concerning the various eye reflexes.

HIRAM WOODS, M.D.

Medical Progress.

ARREST OF HICCUGH.—Dr. Louis Kolipinski of Washington, D. C., in referring to the article on "Arrest of Hiccough by Depressing the Tongue" in the JOURNAL for February 25, 1899, says: Kindly allow me to report two other cases, supplementary to the one above noted:

1. An old man dying from chronic lead poisoning, followed by tuberculosis, developed hiccough, persisting for nine days. By depressing the tongue the spasm was repeatedly stopped, but returned again in a few hours. The method was discarded, however, on account of a painful and obstinate stomatitis making firm pressure intolerable. Still, it had been successfully applied both by myself and the nurse eight times before we were compelled from the circumstances mentioned to resort to other means of relief.

2. A policeman, recently the victim of a tapeworm, and recovering from a severe anemia caused by the parasite, had hiccough for twenty-four hours. He was unable to sleep on account of it, and passed his time in seeking relief by trying a great variety of remedies suggested by an apothecary. I depressed the tongue; there was one very audible spasmodic sound and two or three noiseless contrac-

tions of the diaphragm and the hiccough ceased.

In the "Practice of Medicine," by Dr. George B. Wood, a favorite American work of its day, remedies for hiccough are divided into two classes—those that stop it and those that prevent its return. Of the latter class I find quinine to be the most valuable. The dose is five grains of the muriate twice a day. In the case of the policeman the hiccough reappeared in a few hours, but having given him this remedy he returned to report his cure the next day.

I find the most convenient instrument for depressing the tongue to be a Türk's tongue depressor, preferably of metal, as it allows one to crowd the tongue well down on the floor of the mouth and, at the same time, to make pressure backward and downwards the pharynx and larynx.

* * *

TYPHOID FEVER AND TRICHINOSIS.—H. Fischer (American Journal of the Medical Sciences) reports an old observation, being the case of a young butcher who developed typhoid fever and trichinosis simultaneously. Two days after eating excessively of raw tainted meat he had chills, loss of appetite, pains and great weakness of the limbs. Six days later he was admitted to the hospital with all the signs of a severe typhoid. A large bed-sore developed over the sacrum. On removing the gangrenous tissue a piece of healthy muscle was accidentally cut away, which even to the naked eye appeared thickly studded with trichinae. Microscopical examination showed the trichinae to be very near each other and encapsulated, the capsules still transparent and the parasites very lively. The patient died of pneumo-pleuritis. The autopsy showed the typical lesions of typhoid fever in the ileum. There were many trichinae in all of the muscles. The clinical signs of trichinosis were unimportant, those of typhoid fever dominating the clinical picture. Neither edema nor stiffness of the muscles was observed. The trichinae grew and increased undisturbed by the high septic fever or the changes in nutrition and structure of the muscles caused by the typhoid fever.

HYSTERICAL INSANITY.—In his manual of "Psychological Medicine," Dr. Edward C. Mann recommends for the student of medicine the classification of insanity originated by the eminent German, Professor Krafft-Ebing. One of the heads in his classification he calls "Hysterical Insanity," dividing it into the transitory and chronic forms. Under transitory forms he places "(a) with fright, (b) hystero-epileptic, (c) ecstatic visionary form, (d) moria-like conditions." Under chronic forms, "(a) hystero-melancholia, (b) hystero-mania, (c) degenerative states, with hysterical basis." Dr. Mann has always been recognized as one of our best authorities on the subject of insanity, yet a physician who is termed an insanity expert states before a jury that in his forty-three "years of experience" he has never seen or never heard of hysterical insanity.

* * *

A CONTRIBUTION TO OUR KNOWLEDGE OF DIPHTHERIA.—Hennig, in *Pediatrics*, in comparing two epidemics which occurred previous to the antitoxine period—1890-1891, in a village near Tübingen, and 1893-1894 in Tübingen proper—lays stress on the fact that in the first epidemic, presenting much more favorable surroundings, numerous cases appeared in 41.4 per cent. of the families, while in the latter only 11 per cent., with an even higher mortality, occurred, although the surroundings were less favorable. He points out, in this relation, how careful we should be in judging of the effect of inoculation of diphtheria antitoxine as a preventive measure. The question of immunization, especially when we consider the short time in which the so-called immunity of dwelling-houses against diphtheria is active, must not be answered hastily.

* * *

BRANDIS (*Medical Times*) has collected ten cases of syphilis in physicians, all infected professionally in the fingers and all extremely violent cases, only yielding to prolonged and repeated treatment. The diagnosis was made very late in each case.

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BALTIMORE, JUNE 10, 1899.

THE meeting of the American Medical Association, with its various side shows, at Columbus during the past week attracted a large number of physicians from all over the country, but especially from the West, from which section perhaps the largest number of members come. While the amount of work crowded into a few days hardly receives justice, there are many advantages in these meetings, and they will always continue to be successful even if the matter presented is not always of the highest scientific character.

Columbus is a charming place of meeting, and the profession and public there have spared no pains to open freely their doors and grant every act of hospitality to the visiting physicians and their families. The programme of the Association reflects great credit on the committees in charge, and the whole arrangements at this meeting proved that no mistake was made when Columbus was selected. Besides the *Journal of the American Medical Association*, the *Columbus Medical Journal* issued special souvenir numbers, with portraits and views of Columbus, thus reflecting great credit on the enterprise of these two journals. Future numbers of journals all over the country will contain for some time to come detailed accounts of this meeting.

The attempt in recent years of the optician to replace the oculist has at last begun to receive the attention it deserves from the profession. Every optician, every little shop and every department store thinks it possible to have some one to fit glasses as skillfully as any oculist who has taken a medical course and given his time to the special study of the eye.

As our correspondent points out in this issue, the optician often fits glasses properly and removes the trouble, but his failures alone come to the oculist's attention, and they are not only many, but the harm done by ignorant fitters of glasses can hardly be calculated.

If opticians continue to fit glasses and correct irregularities of refraction it is time they should be properly licensed, not with a view to helping the profession of oculists, but in order to protect the ignorant public, which always turns where apparent cheapness announces itself. The present method not only helps the oculist, but it also destroys a certain number of eyes each year and does more permanent harm than is suspected. To obviate this some plan of licensing and limiting the powers of opticians is needed. The letter of our correspondent should be read with care.

* * *

THE severe warm weather of the past week makes the public appreciate more than ever the great liberality of Mr. Harry Public Baths. Walters of Baltimore, who has guaranteed a sum sufficient to equip and carry on several public free baths in Baltimore. This is a step which has elicited the interest of the Maryland Public Health Association, the Arundell Club and many public-spirited citizens. The young boy who longs for the cold water and a good swim takes any risk to have his dip in the dirty waters of the docks or in neighboring streams, and, although against the law, few officers would interfere in such an act. There is danger when small boys not able to swim go into streams they do not know and sink into a deep hole, never to reappear. The poor of any large city compelled to remain in the hot city the whole summer through, and having no facilities for bathing, will appreciate the generous gifts for the free baths, and the large numbers using the meager facilities of former summers testify to the importance of baths for all.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending June 3, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	2	..
Pneumonia .....	..	9
Phthisis Pulmonalis.....	..	22
Measles	34	..
Whooping Cough.....	1	..
Pseudo-Membranous Croup and Diphtheria. }	13	2
Mumps .....	..	..
Scarlet Fever.....	7	..
Varioloid .....	..	..
Varicella	2	..
Typhoid Fever.....	..	1
La Grippe.....	..	..

The death of Dr. Norman Kerr in London is announced.

Christian Scientists are not having an easy time in some States.

The Robert Garrett Sanitarium for Children at Mt. Airy, Md., is open.

Mr. Harry Walters has given \$45,000 for free public baths in Baltimore.

The medical department of the University of Vienna will soon celebrate its 500th anniversary.

Dr. Robert J. Bogue, a graduate of the University of Maryland in 1866, died in Baltimore last week.

The meeting of the American Pediatric Society will take place at Deer Park, Md., June 27, 28 and 29.

Governor Roosevelt has decided that a city may support a municipal hospital outside of the city limits.

The bill for shorter hours for New York drug clerks has been passed, but it did not receive the governor's signature.

The powers and privileges of the State Board of Medical Examiners of Tennessee have been curtailed by the legislature of that State.

The subject of Dr. Osler's Cavendish lecture before the West London Medico-Chirurgical Society next Friday will be "Cerebro-Spinal Fever."

It is announced that all of the thirty-three candidates for the degree of M.D. at the Johns Hopkins Medical School will receive their degree next week. Two of them are women.

At the Baltimore Eye, Ear and Throat Charity Hospital 3702 patients were treated during 1898, 11,219 visits were paid in the dispensary, and 467 surgical operations were performed.

At the last meeting of the American Orthopedic Society Dr. R. Tunstall Taylor was elected first vice-president, which is a great but well-deserved honor for so young a man.

The American Gynecological Society elected the following officers for the ensuing year: President, Dr. George J. Engelmann of Boston; vice-presidents, Drs. Edward L. Duer of Philadelphia and Seth C. Gordon of Portland, Maine; secretary, Dr. J. Riddle Goffe of New York; treasurer, Dr. J. Montgomery Baldy of Philadelphia.

The American Academy of Medicine elected the following officers for the ensuing year: President, Dr. G. Hudson Makuen of Philadelphia; vice-presidents, Dr. A. G. Plumber of Salt Lake City, Dr. A. Goldspohn of Chicago, Dr. Edwin F. Wilson of Columbus, Ohio, and Dr. A. L. Benedict of Buffalo; secretary and treasurer, Dr. Charles McIntyre of Easton, Pa.; assistant secretary, Dr. W. L. Pyle of Philadelphia. The place of the next meeting will be selected by the council.

The following officers have been elected by the American Medico-Psychological Association: President, Dr. Joseph G. Rodgers of Indiana; vice-president, Dr. Peter M. Wise of New York; secretary and treasurer, Dr. C. B. Burr of Michigan; auditors, Dr. Thomas J. Mitchell of Louisiana, Dr. William Mabon of New York; councillors for three years, Dr. C. B. Bancroft of New Hampshire, Dr. H. A. Tomlinson of Minnesota, Dr. S. F. Cook of Ohio, Dr. A. W. Hard of New York.

Officers of the American Laryngological Association for the coming year are: President, Dr. Samuel Johnston of Baltimore; first vice-president, Dr. T. Amory De Blois of Boston; second vice-president, Dr. Moreau Brown of Chicago; secretary and treasurer, Dr. Henry L. Swain of New Haven; librarian, Dr. Joseph H. Bryan of Washington; member of council, Dr. William E. Casselberry of Chicago; committee of arrangements, Dr. T. Morris Murray of Washington. The next meeting will be held in Washington.

Book Reviews.

DISEASES OF THE EYE. A Handbook of Ophthalmic Practice. By G. E. de Schweinitz, Professor of Ophthalmology in the Jefferson Medical College, Philadelphia, Pa. W. B. Saunders, publisher. Third edition. Pp. 696. Cloth, \$4.

No farther proof of the worth and welcome of this book is needed than the fact that in six years a third edition is necessary. It is not hard to see wherein lies its popularity. Dr. de Schweinitz writes clearly, forcibly, somewhat dogmatically, and shows excellent judgment in selecting the subjects upon which students need instruction. His illustrations are valuable. This is especially true of the descriptions of operations. One can go to this book for information and get in a few pages, or maybe lines, the practical gist of the subject. Again, the work is up to date. The latest researches in bacteriology as applied to eye diseases, methods of sterilization, local anesthesia, etc., are set forth. If there is a fault in its general plan or its detail—and whether there is or no is a matter of individual opinion upon what “students and practitioners” need—it is, we think, in places, a lack of thoroughness, a tendency to give results of research and practical facts rather than to outline for the student principles upon which he can do his own thinking. These latter are not entirely wanting; indeed, in the chapters upon optics they are now and then over the head of the average medical student. Two or three examples will illustrate. There is no chapter devoted to the anatomy of the eye; nor, as in other works, is the anatomy of each structure given in the chapter devoted to its diseases. Here is, at least, an omission which drives the student to another book for necessary information. On page 64 a few lines are given to the color of the iris. “The color of the iris of all new-born children is of a light grayish-blue; the stromal pigment is developed subsequently.” What is the stroma? What the “stromal pigment?” Why does its non-existence produce a “grayish-blue” color? So far as the book under discussion goes, there is no answer. Compare Fuchs’ description, occupying very little more space (text-book), and it is seen that the ideas given by the two writers distinctly differ in thoroughness and clearness. Again, the rules for detection of color-blindness are given clearly enough, but there is no explanation vouchsafed. There is mention of Helmholtz’s theory of color-blindness; but of

Young’s theory of color perception, as modified by Helmholtz, and generally accepted as a working basis, there is no mention. Compare description of same in Juler’s book. Again “the author doubts the propriety of any ripening operation.” This in reference to immature cataracts, after mentioning the procedures employed and the surgeons using them. Not a word to explain the doubt. A few lines would have given the thoughtful reader most useful and suggestive information. There is enough for the student who accepts his professor’s or author’s statement as the last and authoritative word, but not enough for one who consults the book of a leader in ophthalmological thought, either to obtain complete information upon a well-known subject or a useful opinion upon a mooted question. One is a little surprised to find no allusion in tests for muscular imbalance to Duane’s “Parallax Displacement.” It is, we think, more suggestive and useful than many given.

REPRINTS, ETC., RECEIVED.

Infection After Abdominal Operations and Its Treatment. By Hunter Robb, M.D.

Some Remarks About the Study of Medicine in Germany. By Emil Amberg, M.D. Reprint from the *Leucocyte*.

Deaths (Ten) Surgical and Causes. By Merrill Ricketts, Ph.B., M.D. Reprint from the *Cincinnati Lancet-Clinic*.

The Dermal Coverings of Animals and Plants. By B. Merrill Ricketts, Ph.B., M.D. Reprint from the *Cincinnati Lancet-Clinic*.

Acetanilide; Its Uses as a Preventive Measure in Premature Expulsion of the Ovum. By Stephen Harnesberger, M.D. Reprint from the *Journal*.

Serpents and Their Venom—Copperhead, Coral and Rattlesnake. By B. Merrill Ricketts, Ph.B., M.D. Reprint from the *Cincinnati Lancet-Clinic*.

The Influence of Extirpation of the Ovaries Upon the Structural Changes in the Uterus. By Hunter Robb, M.D. Reprint from the *Cleveland Medical Gazette*.

Primary Focal Hematomyelia from Traumatism; A Frequent but Often Unrecognized Form of Spinal-Cord Injury. By Pearce Bailey, M.D. Reprint from the *Medical Record*.

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Original Articles.

CANCER AS A PARASITIC DISEASE.

By Roswell Park, M.D.,

Buffalo.

READ AT THE CENTENNIAL MEETING OF THE MEDICAL
AND CHIRURGICAL FACULTY OF MARYLAND, HELD
AT BALTIMORE, APRIL 25-28, 1899.

IN the century during which your learned society has been in existence there has never come before it any problem for discussion so important, nor probably one upon which views have changed so often, as that upon which I have been invited to address you. And this invitation, by the way, came almost with the unexpected force of a demand, since it was extended through a gentleman for whom personally I have the highest and most affectionate regard, and whose attainments and natural gifts have caused him to be accepted everywhere as a leader in our profession. When, therefore, he invited me to thus come before you and take this as my subject, it was an invitation too tempting to be declined even by one so unworthy as myself. I imagine that it was but another expression of his genial good-nature, in that he wished especially to afford an opportunity to tell you of what we are trying to do in our State with public aid in solving this great problem. Whatever his reason, however, I regard it as a rare opportunity to be able to bring you the congratulations of a Sister State, and of a large collection of technical schools, upon this the centennial anniversary of a society which has done so much good work and enrolled so many honorable names as yours. By such

a meeting as this you set an example which every State in its turn should follow, and you give the impetus to collective work and collective investigation which every large association of men needs.

There probably has never been a subject in the domain of medicine which has attracted more attention, or upon which men's minds have been more active, than that of the nature of cancer, and this should be stated always in reply to the cynics who wonder why we have not learned all about it long ago. The very fact, however, that it is today so moot a question finds its own answer in the fact that only now, if even yet, have we been able to furnish a reasonably or partially satisfactory solution. One reason for this trouble in the past has been a lack of concerted effort. Men have studied the disease wildly or from a very restricted point of view, having in many instances pet theories which they sought to prove, caring little or nothing for the studies of others or for the inconsistencies of their own hypotheses. One of the greatest divisions of opinion has been with regard to the local or the constitutional origin of cancer. The importance of establishing one or the other will appear in a moment, if one but consider how the whole question of treatment hinges upon what may be determined in this regard. If cancer be primarily a constitutional condition, there must necessarily be an end to mechanical therapeutics. If, on the other hand, it be a local disease, there is a time in the history of every growth when, if it be accessible and be recognized in time, it can be so removed by radical operation that there may be offered every prospect of absolute cure. How eagerly, then, the surgeon has watched for the demonstration of its

local origin I need not even remind you.

Thirty years ago that most versatile English scholar, Jonathan Hutchinson, read an important paper, in which he enunciated and emphasized the views which he has since maintained, that cancer is a disease essentially local in its beginnings, and insisted upon the paramount importance of this doctrine as the only safe basis of surgical treatment. This paper had a far-reaching influence and gave rise to numerous other papers and discussions before various English societies. Some years later, when discussing this same subject and referring to his earlier expressions, he said: "It is the conviction which grows with each year's experience that in the rules of practice which should spring out of the full and hearty adoption of the doctrine of the local origin of cancer rests our only hope of being able to save those who consult us from the dreadful horrors of this malady. 'Too late! Too late!' is written in legible characters on three-quarters of the cancer cases when they come under the notice of the operating surgeon."

The English surgeons and pathologists as a class have leaned strongly toward the so-called precancerous stage, which must pass today as a recognition of either a local or a constitutional predisposition to infection. This may be due to disturbances in nutrition, to hereditary influence, to previous injury or to some congenital defect or departure from the normal condition, as when, for instance, we see cancer developing in branchiogenic cysts. But it by no means follows that a local disease is necessarily the result of a constitutional inheritance, for, as has been significantly suggested, the inheritance of a fortune is a very different thing from its acquisition, and gives no clue as to how it may have been secured. Senility and the decadence of tissues which have passed the period of their usefulness and are about to undergo physiological rest are undoubtedly predisposing causes. So we find also predisposing conditions in certain parts of the body where embryological vestiges or rests are found, as the regions of the pylorus, caecum, adrenal rests, etc. That infection occurs in some places more easily than in others is every-

where recognized, while everywhere we try to account for the facts by certain changes too minute to be recognized in the cells.

It is safe to maintain today that the origin of cancer is now purely a biological problem. To act as do epithelial cells when they produce cancer there must be present some stimulus, either internal or external. To acknowledge the former is to confess that there are influences at work which we cannot appreciate, much less name; subtle influences, whose effects only are perceptible, or else that it is purely a question of heredity, which of itself is the most subtle and ill-understood of all. If we put aside, however, these hypotheses, there is still before us the possibility of stimuli from without. Most prominent of the external stimuli, and that which appeals to our reason as a possibility, is naturally some form of parasite, although a long list of improbable external stimuli might be enumerated. What has especially called attention to the possibility of an external stimulus in the form of a parasite as the etiological factor in cancer has been and is the presence within cancerous tissues of bodies of varying form, which cannot be definitely classified as either degeneration products of the cells or as true parasites. This, of course, referring purely to the histological point of view.

It will be readily understood that the mere observation of such bodies and the study of their apparent relations to the tissues, especially in fixed preparations, cannot lead us to a final conclusion regarding their nature. From the beginning many have committed themselves to the belief that these bodies were none other than parasites, while others, in fact, the large majority of observers, have contended that this was not proven. Various experiments to demonstrate that cancer is transferable have been made, but when successful have always been met by the argument that the mere transference of a cancer cell under favorable conditions proves nothing more than that the cells possess within themselves the ability to continue growth in the new host.

Nevertheless, what is every metastasis except a transplantation experiment un-

der most favorable conditions, and why have men been so ready to accept metastasis in the generally accepted infectious conditions as sure expressions of infection, and so loth to regard them in the same light when they occur in cancer?

The duplex nature of this problem is most apparent, and obtains in that it is both a matter of the deepest scientific interest as well as the greatest sociological and public importance. For instance, Duehrssen has recently claimed that more women die every year in Germany of cancer of the uterus than were lives lost in the Franco-Prussian war, and that women during the climacteric period are subject to as many chances of death from cancer of the uterus as soldiers to be killed during active warfare. If the nature of cancer can be established, and if in time a suitable prophylaxis and treatment can be discovered, the government has as much indicated duty in this matter as in the case of consumption or other communicable disease.

I have so recently, and elsewhere, pointed out the startling increase of cancer all over the world, and particularly for my own purposes in my own State, that I do not think it necessary to burden you with any figures, simply falling back upon the easily demonstrated fact that in all civilized countries the death-rate from this disease is constantly increasing, until it is, roughly speaking, now four or five times what it was fifty or sixty years ago. In considering topics of this kind one naturally draws comparisons between cancer and certain other generally prevalent diseases, of which consumption is the most common and the most applicable. Twenty-five or thirty years ago consumption was the greatest scourge of the human race, with the exception of those acute infections which destroy whole communities. Then came the discovery of its cause, and later have followed sanitary and improved therapeutic measures, by which its spread is much more limited and its treatment much more successful. As a result, we have now a gradually decreasing death-rate from this disease. Can any rational man deny the benefit in the same direction which we may expect to accrue from a successful study and de-

termination of the causes of cancer in various parts of the world and with various forms of private, and especially public aid?

Institutes for infectious diseases and sanatoria for the treatment of consumption have been founded and conducted to the great enhancement of human happiness and human health. But cancer, which undoubtedly is usually a still slower form of infection, continues to claim its thousands of victims, to devastate localities and to be the hideous specter which stalks in the shadows of many a household, and yet practically never until a year ago did any State or public government consider the problem of sufficient importance to appropriate money toward its solution. Cancer hospitals have been richly endowed, with never a laboratory in them. Grants have been made occasionally by learned societies for a limited period of time to enable one or more individuals to prosecute studies in this direction, but it remained for the State of New York to publicly consider the matter and to appropriate a sum of money annually for the purpose of equipping and maintaining a laboratory to be devoted to this especial purpose. The first money so appropriated became available in May of 1898, and the institution was organized and placed under the direction of the medical department of the University of Buffalo. Since this time active work has been constantly going on, and with already in the past few months a number of results which give the greatest promise for the future. It has been hard to make legislators appreciate that this was a matter of years of study and research, and that to expect immediate results was to defeat the very object of the appropriation, which was careful and painstaking study.

It will be universally conceded that oncological studies must now and henceforth be carried on in the biological laboratory, because the nature of cancer is henceforward a biological problem. The nature of all the infectious diseases was solved by the biologists, *i. e.*, the pathologists or the bacteriologists, and we must look for light upon our present problem from the same direction.

The cancerous process is not to be in all respects compared with known infections, save in certain obvious directions, until the exciting cause is finally definitely recognized as an organism. As I have elsewhere pointed out, the length of time between infection and clinical phenomena varies within extraordinary limits in the various infectious diseases. There are infections which kill in a few hours, others in a few days, still others in a few weeks, while in the case of several we know that this interval is protracted over several months, or even years, being, nevertheless, always fatally terminated in the natural course of events or unless science intervenes. It is, however, no argument against the parasitic nature of cancer to have to acknowledge that even years may elapse between the two events, *i. e.*, infection and death. No one will think of denying that this is true in leprosy or in rhinoscleroma.

The communication of cancer from one part of the body to another is a not infrequent and now well-recognized possibility, or even danger. I mean by this direct communication, and not a metastatic invasion. Metastases characterize nearly all the neoplastic infections. In the ordinary infectious granulomata, however, it is only the parasites which wander around and produce metastatic foci, but when we deal with cancer it is the cells of the primary tumor, apparently, which are conveyed from their original position and produce wherever deposited a secondary tumor whose cells are not necessarily normal to that locality. These differences are significant, but not fundamental, and may constitute, as Lubarsch has emphasized, a sort of novelty in the study of infectious disease.

The communication of cancer from one part of the body to another is a now well-recognized danger. Under no conditions are ordinary inflammatory phenomena reproduced without the transfer of the specific organism. It has been completely established of late that bacteria can pass through certain tissues leaving no trace of their passage, but finding resting-places at remote points. It is claimed by Bosc that his laboratory investigations illustrate the facility with which the organ-

isms he has isolated from carcinoma may pass from peritoneal to pleural cavities and yet leave no evidence in the diaphragm of their passage through it. Although this explains nothing, it is of importance to know that organisms entering at one point might migrate widely and produce cancer at some other. That certain tissues and localities are more easily invaded by these organisms is only another expression of a now well-known phenomenon in pathology. Whether organisms actually possess selective activities or whether heredity or other subtle influences make certain tissues more inviting than others we may not yet say. Nevertheless, certain organisms show always certain affinities. We may draw certain analogies also from that most rapid of all infections, bubonic plague, for whose organism there has yet been demonstrated no constant path of infection nor port of entry. It enters sometimes in one way and sometimes in another, so far as we know, and leaves no traces even when the infection has become general. This is true also of malaria, for we can scarcely regard the alleged role played by certain insects as positively demonstrated. But even assuming this method of infection, there remains in the tissue thus sown or infected no permanent trace of the organism itself.

Surely I do not need to remind this audience of what twenty-five years have accomplished for us in the way of improvement of technique and of optical facilities, nor of the new world which these means have exposed to our study. To say, however, that limits have yet been reached in any one of these directions would be absurd. Already we know of organisms which pass through porcelain, and which as individuals elude the best lenses yet made. Nevertheless, we may feel confident that more exact methods for their study will yet be devised.

The theory of infectivity of cancer is far from being new. Two hundred and fifty years ago Lusitanus published a striking case, and Tulpus, who figures as the "Anatomist" in Rembrandt's great picture, voiced his view in the statement that "the ulcerated cancer is just as contagi-

ous as inflammation of the eyes." This was in 1673, and in 1731 Junker maintained that cancer is contagious, only requiring that infective material should fall on a suitable spot where there is already a breach of surface. Certainly the most radical thinker of today can scarcely take more advanced ground than this. Striking events indicate how generally men are appreciating the necessity for a collective study of this disease. A few years ago a small number of surgeons and pathologists formed in Paris a league for the study of this disease, and a journal is now being published quarterly, *i. e.*, *Revue des Maladies Cancereuses*, devoted to this particular topic. It is under the direction of those well-known authorities, Duplay, Lannelongue and Cornil. It is now in its third year, and contains a great deal of value. There exists today in London a Society for the Prevention of Cancer, which might well find associate members or active imitators in this country.

The most recent and striking expression of interest in this direction has come in the shape of the April number of the London *Practitioner*, which is entirely devoted to the subject of cancer, the contributions being entirely by English and American surgeons, including the writer. These men, writing independently, and each from his own standpoint, practically agree as to the parasitic nature and infectivity of the disease. Power, for instance, furnishes most striking evidence in favor of transmission of the disease, in which locality seems to play an important part. His paper on the "Local Distribution of Cancer and Cancer Houses" is an extremely painstaking and convincing one, and in the care evinced in its preparation is to be compared only with the recent study of Behla (*Ctblt. f. Bakteriolog.*, Vol. 24, p. 780) on the increase of cancer, which I have elsewhere epitomized. Power does not necessarily believe that cancer haunts houses, nor that the disease is water-borne, but he does believe that it haunts localities, and is of the opinion that the germ of the disease inhabits some intermediate host belonging

to the vegetable or animal kingdom, by whose agency it somehow finds its way into the human body. He sees strong analogies between cancer and malaria in this respect, a resemblance made still closer by the fact that Haviland seems to show that cancer and malaria have a definite relation to marshy soil, at least in some parts of the world.

In a well-illustrated article in this number Plimmer also commits himself entirely to the parasitic theory, although not to the recognition of a single germ. He reminds us that the first one to name these bodies was Metchnikoff, who regarded them as parasitic protozoa, using this term in its widest significance. Plimmer is generous in his recognition of the work done in other countries, also broad-minded in that he fully recognizes the pleomorphism and the polymorphism of these lowly organisms. During six years he has examined microscopically 1278 cases of carcinoma, in 1130 of which he has found parasitic organisms, while ninety of the entire number were unfit for examination. He states positively that these bodies are constantly present in cancer and constantly absent in other diseased or degenerated conditions. He seems to corroborate the views enunciated by Bramade, who communicated to the French Société de Biologie last year similar results, although not from so large a number of cases examined. Plimmer has found that in some cases the parasites are present in overwhelming numbers, and that the cases then take an acute course and present a clinical picture as different from that of chronic cases as can ever be seen between acute and chronic tuberculosis, in all save final interpretation. Therefore, these various investigators practically agree, and whether the organisms prove to be animal or vegetable is a matter of at present secondary importance, the principal thing being to establish their parasitic character.

In reviewing in short the status of this controversy, it may be well to array before you the names of those who have committed themselves definitely to the parasitic theory, and to give you in short the grounds on which they base their

conviction, as well as to call attention to those who, by industrious work and elaborate publication, have attempted to show that the bodies which appear in cancer are the result of tissue degeneration. The most prominent of those who have committed themselves definitely to the parasitic theory of cancer are Darier, Albarran, Nils Sjöbring, Malassez, Thoma, Foa, Soudakewitch, Bosc, Podwysoski and Sawtschenko, Cattle, Vedeler, Ruffer, Plimmer, Walker, Metchnikoff, Kahane, Jürgens, Korotneff, Kürloff, Müller, Clark, Sanfelice, Roncali, Bramade, Fabre-Domergue. The principal opponents of the parasitic theory are Hansemann, Marchand, Ziegler, Nöggerath, Neisser, Ströbe, Pianese, Schwartz. The great body of scientists may be said to occupy a more or less neutral position, not denying that the cause of cancer may possibly be a parasite, but not acknowledging that sufficient proof has yet been brought to conclusively establish the fact. Of those who in their published articles have committed themselves to the parasitic theory may be mentioned Sanfelice, Roncali, Plimmer and Bramade, among the more recent, in that they claim not only to have isolated from carcinoma a definite parasite, but that these parasites, when injected into animals, produce tumors and alterations of the tissue which to the minds of these authors offer sufficient evidence to indicate that these organisms are the etiological factor in carcinoma.

Inasmuch as I have written several times upon this subject, I would like to make my own position clear. From a clinical standpoint I have long been convinced that the only rational explanation for cancer must be founded upon the parasitic theory. If one compares the illustrations published with the articles of those who have advanced the parasitic theory, one is at once struck with the remarkable similarity, if not identity, of the forms which they have observed. These forms, while of great variety, have certain definite characteristics by which they may be recognized. Even the illustrations of those who are opposed to the parasitic theory leave no doubt that their authors have observed the same forms.

If, then, it be possible to isolate and cultivate from carcinoma a parasite which in its morphology appears identical with the cell inclusions in carcinoma, it will be acknowledged that we have gone a step farther and have demonstrated that the cancer inclusions are in all probability not the result of cell degeneration, but actual organisms. This much we may say has been accomplished. Careful perusal of the publications of Roncali, Sanfelice, Plimmer and Bosc will convince the most conservative that we are justified in advancing this far. It has been my fortune to inspect the preparations of Roncali, and it was this fortunate incident, combined with my long-standing conviction based upon clinical evidence, which has led me to openly champion the parasitic theory of carcinoma and to advocate the establishment and maintenance of systematic investigation along these lines. Bramade and Sanfelice claim that the parasites which they have isolated have produced in animals typical carcinomata. Their statements have not been definitely credited, and it is to my mind this portion of the work which may be said to still remain in doubt. It is not necessary for me to remind you of the great difficulties which surround this form of experimental demonstration, or to reiterate what has so often been stated, that we may not expect to repeat in animals the conditions which obtain in man. The great significance of the apparent uniformity in the morphology of the parasites which have thus far been isolated may not be overlooked. Roncali and Sanfelice have carried on their labors in Italy, Bosc in Montpellier, Plimmer in London and Jürgens in Berlin, and this wide geographical distribution, combined with the uniformity of results obtained, if not associated with uniformity of interpretation of these results, must strongly indicate that we are at last approaching a not too far distant day when this, the greatest riddle of modern pathology, shall at last be solved.

As I have said, the solution of the origin of cancer is now a purely biological problem, and it is to the unbiased and painstaking efforts of the laboratory worker that we must look for its solution.

PATHOLOGY AND ETIOLOGY OF SKIN DISEASES.

By George C. Clark, M.D.,
Washington, D. C.

READ BEFORE THE MEDICAL AND SURGICAL SOCIETY,
MAY 29, 1899.

THE skin being subject to the same morbid processes to which other parts of the body are, we find in this important organ the same pathological changes that take place in other organs and tissues of the body. Of the great variety of pathological changes as found in the skin the most important are anemia, hyperemia, inflammation, hemorrhage, hypertrophy, atrophy and the formation of new growths.

All the layers of the skin are prone to these morbid changes, but the corium or true skin, because of its being the seat of the blood and nerve supply of the skin, is the one which usually suffers, at least primarily, extending to the other layers subsequently, it may be. The skin is also attacked by a great variety of animal and vegetable parasites, and is the seat of various neurotic disturbances. Functional and organic disorders of its numerous and various glands and their ducts also take place. The same is true of the other appendages of the skin—the hairs, hair follicles and nails.

Anemia is indicative of deficiency, while hyperemia is due to an excess of blood in the capillaries of the skin. The minute phenomena of cutaneous inflammation are identical with those found in inflammation elsewhere in the body. Cutaneous hemorrhage is generally the result of rupture of the cutaneous capillaries, but may occur by diapedesis. Hypertrophy consists in an abnormal increase in the size of normal tissues, and may be due either to excessive development of pre-existing elements or to the growth of new elements, while atrophy is the decrease of size or number of tissue elements.

New growths are produced by the deposit of new material and development of new tissues in the substance of an organized structure. If made up of simple connective tissue they are benign in character, but made up of cellular matter are, as

a general rule, malignant. Such is, in brief, the general pathology of the skin.

Bacteriological research has gone on in the study of skin affections equally with its study in other parts of the body, and has necessarily modified and enlarged our conceptions of the etiology and pathogenesis of these diseases greatly; and doubtless as the methods of investigation in that line improve the number which is due to bacteria will increase. Professor Unna thinks that all skin affections should be regarded as due to parasites for which no other causes can be found, and he places in the list of these affections due to bacteria a number which we had always previously been taught to regard as due to or symptomatic of some constitutional affection, as psoriasis and some kinds of eczema, and while the parasitic origin of skin diseases is not so generally accepted by the authorities in this country, the proof not being sufficient to remove all skepticism, nevertheless any discovery in that line which would make the proof complete would not be a great surprise to any. It is a very tempting theory for such affections as psoriasis and certain kinds of eczema for which no possible cause can be discovered often; nevertheless the American mind requires some more substantial evidence.

But aside from these doubtful instances, there are still a number of affections to which, before the days of bacteriology, no satisfactory etiology could be assigned and which are now assigned to that class, and no doubt rightly, because, while in many of them, as for example, syphilis, contagious impetigo, anthrax, the exanthemata and probably tuberculosis of the skin, scrofuloderma and possibly carcinoma in its early stages—I say that notwithstanding the fact that the particular pathogenic germ has not as yet been isolated which is the cause of these affections, yet the circumstantial evidence in support of the fact that they are the cause is convincing, and we no longer entertain any doubt that some day the proof will be made absolute by the discovery of the causative germ in each and all of these affections. Of course, we do not mean to say that even in this class of cases bacteria are the sole cause, for there

are other factors which probably enter into every case to render the skin more vulnerable and increase individual liability or susceptibility to the development of certain diseases, and so far as we are aware of yet are the only etiological factors in many skin affections. These are heredity, age, sex, diathesis, occupation, season of the year, climate, plethora, debility, pregnancy, dentition, dietetic errors, neurotic disturbances, constitutional diseases, improper clothing, heat, cold, personal habits and a host of others.

Heredity probably exercises the most important influence, either alone or in conjunction with one or more of the above-mentioned causes, or with the bacteriae in the causation of skin affections in that certain individuals inherit a weak or susceptible skin for certain affections, for how otherwise will you explain the very numerous list of skin eruptions which are due to the taking of drugs and the handling or even coming in the neighborhood of poisonous plants of the rhus family, while other persons can take these medicines and handle these plants with impunity; and affections of the urticaria type, which, while usually superinduced by dietetic errors, are found only in individuals with an inherent weakness of the skin for this particular affection. These examples could be added to almost all through the list of skin diseases, but these few will suffice for my purpose.

To go more minutely into this subject would draw my paper out to too great length, and I only wish to say in closing that while much has been learned from the study of skin affections of late years, there yet remains a large field for research, and it behooves all who are interested in medicine, and particularly those in this particular line, to lend his energies and talents to clear up the obscure and disputed points as soon as possible.

CHLORIDE OF ZINC IN CHRONIC METRITIS.—Delbet says (New York Medical Journal) that intra-uterine injections of chloride of zinc are very efficacious in chronic metritis. They do not cause complications and they do not call for anesthesia or lay the patient up.

SIMULATED BLINDNESS AND ITS DETECTION.

By Edward J. Bernstein, M.D.,
Baltimore.

READ BEFORE THE CLINICAL SOCIETY OF MARYLAND,
APRIL 21, 1899.

THE disposition to simulate blindness, either in one or both eyes, is rather rare in this country, except in the case of railroad injuries, where the desire to mulct the company leads the patient to feign blindness, and occasionally in children or hysterical patients for one cause or another. On the Continent, where military duty is compulsory unless some defect can be shown, the attempt is much more common, and all military surgeons are fully aware of the common means for its detection.

Three very interesting cases occurring a short time ago, and in rapid succession, in my practice, lead me to bring this interesting topic before you.

A woman who had been under the care of an oculist for iritis, which had yielded perfectly to treatment, with almost perfect restoration to sight, i. e., she had V. R. E. 5-9, V. L. E. 5-5, with absolutely no defect in the fundus oculi when discharged, met with a railroad accident two years later. She was slightly jarred only, and a few bruises on the shoulder were all that could be detected. She came to me declaring that the accident had brought on a return of her trouble, and that now she could not see with her right eye. The eye was not in the least bit congested, and no lesion could be detected in the fundus. I felt that she was feigning, and proved that she could see.

The second case was that of a little girl whose brother had been under my care for some defect of vision, which was corrected by appropriate glasses. The father bought gold ones for the boy, and the sister evidently forgot her ninth commandment, for she next day informed her parents that she could not see at all, and thought glasses would help her. In great fear the father brought the girl to my office. Neither the ophthalmoscope or external appearance showed any evidence of loss of vision. Detection of simula-

tion was very readily proven by light reflex of the pupils of the eye and the fact that she could be made to look at a near object when the ordinary convergence contraction took place. The "laying on of hands" cured her blindness next day.

The third case was the son of a medical friend. The little fellow had been under my care for a refraction trouble, and I was quite sure of the state of his vision. He had been struck over the right eyebrow with a snowball. He came in to his mother complaining of the pain, but was soon soothed and started off to play again. Some two or three days thereafter he startled his mother with the statement that he could not see with his right eye. His father did not believe his story fully, but after the child persisted in his statement sent him to me. I soon proved by the colored glasses and flames and the pupillary reaction that he was feigning, and ordered that his eye should be smeared with vaseline each night on going to bed. I impressed on his mind that he would read the big letters the next day when he came, and that after that he would read one or two lines more each day till he would be entirely well, which occurred in two or three days.

In handling these cases one must remember that the foundation for success is to make the patient think you believe him implicitly until you have gathered all your evidence. Then tell him very unconcernedly that you are sure he sees quite well.

One must have made a most thorough ophthalmoscopic and subjective test before reaching such a conclusion. To detect simulation of one-sided blindness:

1. One first examines the pupillary reaction of the so-called blind eye. If it be normal, one may think of malingering. For instance, if the right eye be the one in question, the left eye is covered by the hand in such manner that its pupil can always be watched; light is now thrown into the "blind" eye; immediately it will contract, as will also the shielded left eye. If it (the "blind" eye) be under atropine, and so have accommodatory paralysis, this will be detected by engaging the patient's

attention on small object held close to the uncovered eyes. If there be atropine dilatation, of course the "blind" pupil will not contract, but if there be dilatation of the right eye by reason of blindness, it will still contract with its fellow, except under such exceptional cases where there is also oculomotorious paralysis.

2. Observation of the visual axis. If the "blind" eye be covered and the good one engaged upon a near object, then uncover the other eye and watch it; if it make movements either internally or externally it is an evidence that nature is trying to restore binocular vision. If one places before the "blind" eye a prism of ten degrees base towards the nose, an eye which sees will make an attempt to overcome the effect and move outward. A really blind eye will be perfectly still.

3. One places pictures in the stereoscope. On one side place a horizontal line, on the other a vertical; if he see a cross, then he sees with both eyes; or, one has specially-arranged pictures for binocular vision; if he see the total picture, he uses both eyes.

4. One places before the suspected eye a very low prism, three or four degrees, and suddenly remove it (the patient's gaze being directed upon a near object); if this eye make a restitution movement it is evident that it is a good one.

5. One places weak glasses before each eye; then neutralize them; finally, before the good eye place a very strong cataract glass; if he still reads the distant vision letters he is detected; or place a slightly weaker convex glass in front of the good eye, both eyes being open, and get him to read fine print; if he still read it beyond the focal distance of the lens you may know he is doing his reading with his blind eye.

6. One has red and green letters arranged alternately on a black background; before his left eye you place a red glass and before the other a green glass; now ask him to read; if he read all the letters you know he uses both eyes; if only the alternate ones, then only one eye is being used, for green glass only transmits the rays from the green letters and neutralizes the red ones, and vice versa.

7. In a darkened room at ten or twelve feet distance you place a lighted candle; before the good eye place a seven-degree prism with its base up; diplopia only comes to two good eyes; you disclose the fraud by covering the good eye and showing that he sees only one candle now. If he now denies that he saw double, you place the prism in front of the good eye in such wise that only half the pupil is covered by its edge; then you get monocular diplopia. Now if he declare that he sees only one object, you know that he falsifying. One covers his "bad" eye and shows him that he saw double with the good alone. If he now give in that he sees double, open his bad eye and now cover the good eye completely with the prism; he will then say he sees double, and you can readily disclose the fraud.

8. The test for the total field of vision is made with both eyes open, but that can only be done exactly with the aid of the perimeter; you can roughly do this by holding close before the good eye a lead pencil while the patient reads some fine print; if he read uninterruptedly you know he uses both eyes; whereas if only the good eye is used a defect will be found.

When blindness in both eyes is claimed the examination is slightly more difficult, but still can be disclosed by pupillary reaction to light and convergence. Those blind in both eyes have a peculiar stare; their pupils are usually more or less dilated and one ordinarily detects some lesion of the fundi oculi. When these are not seen and malingering is suspected, one may detect it by seating the patient and noiselessly approach his eye with a knife; if he wince or jerk his head away, he is detected.

I have seen one man detected by having the exact height of his eyes from the ground taken; he was then taken out of the room, a very light wire strung across the room before the examiner's desk; the suspect was brought in and asked to approach the desk, which he did; suddenly he ducked his head to avoid the wire and his malingering disclosed.

Society Reports.

BALTIMORE COUNTY MEDICAL ASSOCIATION.

MEETING HELD THURSDAY, APRIL 20, 1899.

ON Thursday, April 20, at 2 P. M., the Baltimore County Medical Association assembled at the Woman's Medical College. The faculty of the college tendered the members of the association a luncheon, which, though informal, was thoroughly enjoyed and furnished opportunities for sociability, which were interrupted by the rap of the president's gavel shortly before 3 o'clock. The meeting was called to order, with Dr. Chas. G. Hill, president, in the chair, Dr. L. Gibbons Smart, secretary. After the reading of the minutes Dr. Wm. L. Smith of Jarrettsville, Md., was proposed for membership. A motion postponing the reading of papers till after the transaction of business prevailed.

Dr. Wm. J. Todd, president of a committee, consisting of Drs. Todd, L. Gibbons Smart and B. F. Sappington, reported appropriate resolutions on the death of former member, Dr. Geo. H. Rohé, which were adopted as follows:

The Baltimore Neurological Society desires to place on record the sense of loss and sorrow felt by its members at the sudden death of their associate, Dr. George H. Rohé. Dr. Rohé was one of the founders of this society, its initial meeting having been held in his office at the hospital in Catonsville. His active interest in psychiatry and neurology dates from his appointment in 1891 to be the superintendent of Spring Grove Hospital. Having been much interested in gynecology, his work among the insane served to strengthen his ideas upon the relation between mental and pelvic disease in women. His name will always be identified with the most active advocates of gynecological operations among the insane. In 1896 he resigned from Spring Grove to become superintendent of the State hospital at "Springfield." Here he was responsible for the architectural arrangements and general scope and management of the new hospital. His conduct of this new work has resulted in making it what promises to be one of the

best institutions in this country. The successful practical operation of the "open-door" system may be said to be entirely due to his wisdom and care. He was a member of many learned societies, in all of which he took very active interest, and it was while attending a meeting of the American Prison Association that his sudden death took place. His writings were voluminous and of much practical importance. As a man he was respected by all and beloved by those who were so fortunate as to know him at all intimately. This society will feel his loss most keenly, and extends its heartfelt sympathy to his widow and daughters.

E. N. BRUSH, M.D.

GEO. J. PRESTON, M.D.

R. F. GUNDRY, M.D.

Committee.

Then followed considerable discussion concerning the place for holding the annual banquet. It was finally decided to hold it in Baltimore. A motion made by Dr. Piper, that a committee be appointed to present histories and biographies of medical men of Baltimore county, was carried, and Drs. Piper and Todd were appointed by the Chair. Dr. Todd was also added to the banquet committee.

The following additional names were proposed for honorary membership: Drs. Jos. T. Smith, Chas. O'Donovan, J. R. Trimble and Eugene F. Cordell. Dr. Jesse C. Coggins was elected an active member and Dr. Thos. Opie an honorary member.

Dr. Jay exhibited a case of malignant disease of the superior maxilla, operated on at the Good Samaritan Hospital by ligation of the external carotid artery and removal of the superior maxillary bone on the right side. The patient is up and about, though it is scarcely three weeks since the operation was performed. There are, however, signs of recurrence.

Dr. Trimble exhibited two cases that had been operated on for gall stones, and related several others. He also exhibited a gall stone taken from a pig nine months old, and concluded from analogy that children of the same age may have gall stones.

Dr. Mussenberger, in discussing Dr. Trimble's paper, said that there is also

a medical standpoint as distinguished from the surgical one presented by Dr. Trimble for the treatment of gall stones. He then proceeded to detail some cases, saying that he never had occasion to resort to surgical intervention, and that all his cases had, notwithstanding, recovered. He claimed that sulphate of sodium was very efficacious, but where this failed he used dilute nitro-muriatic acid with much benefit.

Then followed a paper by Dr. Jos. T. Smith on "Diagnosis of Diseases of the Kidneys," one by Dr. Chas. O'Donovan on "Pharyngeal Diphtheria," and finally "The Pathological Report of a Case of Erysipelas in a Child" by Dr. Claribel Cone. The papers were all very interesting and well received, and especially the last, which was received with much applause and many encomiums for its thoroughness.

Dr. Samuel T. Earle, representing the Medical and Chirurgical Faculty of Maryland, then gave a description of the advantages that membership in the Faculty afforded and also a short synopsis of the programme of the centennial festivities to take place next week, and invited all present to participate. Dr. Herman invited all present to attend the next meeting of the Clinical Society of Maryland in behalf of the society, and the meeting then adjourned, many of the members viewing with much interest the specimens upon which the "Pathological Report" had been based and which had been skillfully arranged under microscopes by the author, Dr. Cone. Another meeting for election of officers will be held at Towson.

NATHAN HERMAN, M.D.,
Secretary.

REMOVING FOREIGN BODIES.—A writer in the International Journal of Surgery says that it is never well to attempt the removal of a needle concealed in the hand or the sole of the foot without obtaining an x-ray picture beforehand, if possible. It will save many disappointments, as they are exceedingly hard to find. Then, unless impossible for anatomical reasons, make your incision at right angles with the shaft of the needle.

MARYLAND

Medical + Journal.

PUBLISHED WEEKLY.

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MARYLAND MEDICAL JOURNAL,
Fidelity Building, Charles and Lexington Streets.
BALTIMORE, MD.

WASHINGTON OFFICE:
Washington Loan and Trust Company Building.

BALTIMORE, JUNE 17, 1899.

A KEEN observer has said that the devil, with all his faults, is industrious, and usually presents himself in an attractive garb. The Soda-Water Glasses. The barkeeper and mixer of alcoholic drinks, as a rule, makes a clean show and uses materials and glasses which are usually clean. It is a pity that the dispensers of soda water and other soft drinks cannot be made to follow the same rules and use clean glasses.

If there is danger of communicating disease in many ways, so often commented on by boards of health, there is certainly a danger in the unwashed soda-water glass and long spoon. The average mixer empties the remains from an unclean glass, gives it a hasty dip into an unseen receptacle containing water long since contaminated and then serves the next customer. Even with ordinary water the practice of using the same glass by many persons is objectionable, but with sticky syrups, oily cream and flavors of all sorts, the chance of getting a clean glass is very small. The long spoons, with hollow handles to be used as straws, are also a curse of the soda-water counter.

At this season of the year, when everyone is bent on quenching thirst, the average person should see to it that even if the contents of his glass are unknown and mysterious, the glass itself and other articles are clean before each use. If the Health Commissioner wants to be bold and fearless and do his duty he will inform the public of the dangers, and also of the nasty customs of drinking such mixtures in unclean glasses.

* * *

It still looks as if the various medical appointments to be filled by the mayor are to be subjected to a political test before their professional fitness is considered. It is more than likely that the present incumbents in office will go out at the end of their time without reference to their records or the work they have done.

The new charter and the victory of what is supposed to be good municipal government cannot expect to work miracles, but there was a small ray of hope that the present incumbents would be carefully examined and their work scrutinized before the new appointments are made. It is much better for a sanitary office to have the same head as long as possible, all things being equal, than for a change at each municipal election to occur. There has been no severe test in any of the offices, but from all appearances they have all done their work to the satisfaction of the city and of the profession, and changes for political reasons alone, simply with the desire of giving a friend a good berth, should not be made.

* * *

It is supposed to make one warm to talk about the weather at this season, but certainly the busy man hardly notices the changes of temperature until after his busy hours, and then if he does have a rest the feeling of heat is so much the more oppressive. The physician more than many other men should have a rest and a change, and he should take it in the summer, when many of his patients are away and when he may have a little relief from the hot streets and other disadvantages of the city in summer.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending June 10, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	..	..
Pneumonia .....	..	11
Phthisis Pulmonalis.....	..	20
Measles	38	..
Whooping Cough.....	..	..
Pseudo-Membranous Croup and Diphtheria. }	9	2
Mumps.....	4	..
Scarlet Fever.....	2	1
Varioloid .....	..	..
Varicella	5	..
Typhoid Fever.....	2	1
La Grippe.....	..	..

The inmates of the Maryland Hospital for the Insane now edit and publish a paper.

The Prince George County Medical Society held its regular meeting last Tuesday at Hyatts-ville.

The Baltimore County Medical Association held its regular meeting at Mt. Washington last Thursday afternoon.

Lawson Tait died last Tuesday, aged fifty-five. He was born in Edinburgh in 1845, and did his best work at the Birmingham Hospital.

The death of Dr. Norman Kerr of Bright's disease in his sixty-sixth year is especially sad when it is remembered that along with Dr. Benjamin Ward Richardson he was a total abstainer and very strong on the subject of so-called temperance. He should have lived at least twenty-five years longer to vindicate his principles.

The Medical Society of Delaware held its annual meeting at Wilmington last Tuesday. The following officers were elected for the ensuing year: President, O. D. Robinson, Georgetown; vice-presidents, W. H. Hancker, Farnhurst, and J. W. Clifton, Smyrna; secretary, John Palmer, Jr., Wilmington; assistant secretary, William P. Orr, Lewes; treasurer, William C. Pierce, Wilmington.

The Tri-State Medical Association of Western Maryland, Western Pennsylvania and West Virginia will meet at the Markleton Sanatorium, Markleton, Pa., Thursday, June

22, 1899, at 1.30 P. M. The following is the programme: "A Résumé of the Physiological Action and Uses of the Mescal Button," Dr. D. W. Prentiss, Washington, D. C.; "Gunshot Wounds of the Abdomen, with Report of Cases," Dr. J. M. Spear, Cumberland; "Reflections at the Thirty-third Mile Post in My Professional Career," Dr. William F. Barclay, Pittsburg; "The Early Diagnosis and Treatment of Melancholia," Dr. E. O. Crossman, Markleton; "Mechanical Treatment in Diseases of the Stomach—Clinic," Dr. A. Endfield, Bedford.

The following announcements were made at the regular commencement of the Johns Hopkins University last Tuesday: Dr. J. Whitridge Williams, associate professor of obstetrics, is now full professor; Dr. L. F. Barker, formerly associate professor of anatomy, is now associate professor of pathology; Dr. R. G. Harrison is associate professor of anatomy. The following assistants to the associates have been appointed: In anatomy, Dr. Charles R. Bardeen; surgery, Dr. Harvey W. Cushing; obstetrics, Dr. George W. Dobbin; physiological chemistry and toxicology, Walter Jones, Ph.D.; Dr. P. M. Dawson is assistant in physiology; Dr. Eugene L. Opie, second assistant in pathology, and Dr. M. T. Sudler, assistant in anatomy. Besides these, a large number of internes, externes and resident house officers of the Johns Hopkins Hospital were appointed.

The Board of Medical Examiners of Maryland held the regular semi-annual examination May 17, 18, 19 and 20. License to practice medicine or surgery in Maryland were granted to Drs. J. Amberg, S. A. Bain, W. J. F. Blaney, H. F. Bradley, A. J. Carrico, S. Claggett, C. H. Conly, H. A. Cotton, T. E. Daugherty, F. Fox, J. R. Green, H. J. Hahn, Jr., A. N. Halabi, W. S. Hall, L. P. Hamburger, J. J. Harward, A. C. Hearn, C. I. Hill, H. Hubbard, F. L. Hughes, H. C. Hyde, H. W. Kennard, N. G. Keirle, Jr., E. A. Knorr, T. W. Koon, S. Law, J. E. Legge, E. C. Ligg, J. McP. Lowrey, Jr., L. B. Milbourne, E. V. Murphy, E. S. Osborne, E. Quarles, C. Riely, T. C. Rontson, J. G. Selby, J. R. Shook, J. K. Shriver, Jr., H. G. Simpers, A. J. Smith, W. B. Smith, T. J. Smith, C. DeF. Snyder, H. C. Solter, W. R. Steiner, G. H. Stuart, M. A. Waters, G. C. Wegefarth, F. H. Weidemann, E. J. Wheatley, E. H. White, M. M. Whitehurst, T. R. W. Wilson, E. E. Wolff.

Washington Notes.

Two cases of heat prostration have been reported to police headquarters.

Acting Assistant Surgeon F. A. Hodson has been ordered from Fort Monroe, Va., to Denver, Col.

The city's milk supply is now undergoing an investigation, the work being done by Prof. J. D. Hird.

Past Assistant Surgeon C. H. De Valin has been ordered to the naval hospital at Portsmouth, N. H.

Two new cases of smallpox have been sent to the hospital this week, making a total of five cases in the detention camp.

Col. Charles R. Greenleaf, assistant surgeon-general, has been ordered to inspect the sanitary condition of Columbus barracks, and on completion of that duty to proceed to San Francisco for duty as sanitary inspector of the camps to be established there for the muster out of troops returning from the Philippines.

Book Reviews.

A MANUAL OF ORGANIC MATERIA MEDICA, being a Guide to Materia Medica of the Vegetable and Animal Kingdoms, for the use of Students, Druggists, Pharmacists and Physicians. By John M. Maisch, Ph. M., Phar.D., late Professor of Materia Medica and Botany in the Philadelphia College of Pharmacy. Seventh edition. Revised by Henry C. C. Maisch, Ph.G., Ph.D., Professor of Materia Medica and Botany in the Medico-Chirurgical College of Philadelphia, Department of Pharmacy. Philadelphia and New York: Lea Brothers & Co.

A perusal of this work leaves one with at least three well-defined convictions. It is very difficult for even the master mind to write a thoroughly acceptable text-book; often it is better, indeed, always it is better to rewrite such a book than to simply revise it, and, lastly, the peculiarities of our times demand practical common sense and up-to-date treatises on materia medica—a treatment which will lift the subject and the substances out of the mire of veritable empiricism and place them in the light of scientific attainment; that will be far less heavily burdened with obsolete, irrelevant and impotent material and carry a fresh and interesting load of facts relating to essentials.

Such, unfortunately, is not found in the "manual" under consideration. It has proven its value and popularity by the repeated editions required, and remains a creditable monument to the conscientious, careful work of its illustrious author. No doubt it was the book of its day, but the revision is scarcely apparent. The book is divided into three parts: Part I—"Animal Drugs." Part II—"Cellular Vegetable Drugs." Part III—"Drugs Without Cellular Structure." After noting heading of Part I, one is surprised to find some nine or ten animal products treated in Part III. Again, one fails to understand just how the distinctions are made which lead to the consideration of extractum glycyrrhizae, oleum ricini or menthol under individual headings, when the well-known active constituents of cinchona and opium are not. Part I occupies nineteen or twenty pages; twenty-five articles are considered, including such highly scientific, *fin de siècle* and much-used remedies as cockroaches, sponges, oyster shells, egg shells, crab stones, cuttle-fish bones and bones in general—"any old bone." Such drugs as ambergris, hydraceum and civet are also described here, with such potent agents as eggs, milk and blood. Isinglass and gelatin are treated separately, because of the striking peculiarities of each. Eight of the nineteen pages are devoted to the articles mentioned, while antidiphtheritic serum is not noticed. The first twenty pages of Part II present twenty-three medicinal roots. In a diversified active experience of twenty-five years one will not find 50 per cent. of these or their preparations used, either in prescriptions or by the laity. Seven or eight pages of the twenty are given up to these eleven or twelve drugs, which are, practically, never used. This space could be put to a much more profitable purpose. By its different use the terseness of its text could be lessened and the student could be given a measure of that which is memory's greatest aid—supporting association.

REPRINTS, ETC., RECEIVED.

Practical Methods for the Differentiation of Coal-Tar Products. By Henry P. Hynson. Reprint from *Merck's Report*.

Dermatitis Venenata; A Résumé of Its Etiology, Symptoms, Diagnosis and Treatment. By Jacob Sobel, M.D. Reprint from the *Medical Record*.

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Original Articles.

MEDICINE IN THE NINETEENTH CENTURY.

THE PRESIDENT'S ADDRESS DELIVERED ON THE CENTENNIAL ANNIVERSARY OF THE MEDICAL AND CHIRURGICAL FACULTY OF THE STATE OF MARYLAND, HELD AT BALTIMORE, APRIL 25-28, 1899.

By Samuel C. Chew, M.D.,

President of the Faculty, Professor of the Principles and Practice of Medicine in the University of Maryland.

*Fellow-Members of the Medical and
Chirurgical Faculty of Maryland:*

It is at once the expression of a most sincere feeling and my bounden duty to tender to you special thanks for the double honor which I have received at your hands in being called for the second time to this presidential chair and in being asked to assume it at this epoch in the history of this Faculty.

A century has passed away since the foundations of our polity were laid. The Act incorporating "The Medical and Chirurgical Faculty or Society of the State of Maryland" was passed by the legislature of this State at its session of 1798, and our earliest record shows that the Faculty met for the first time in the city of Annapolis, agreeably to law, on the first Monday in June, 1799.

This period of a hundred years comprises a fourth part of the whole time that has elapsed since civilization was brought to this Western Continent, and although it may seem brief in comparison with the duration of institutions in the Old World—in comparison with that which makes venerable the ancient seats of medical learning at Padua, at Bologna, at Oxford or at Edinburgh—yet, if we accept the tra-

ditional date of the origin of mankind, it answers to fifteen hundred years of Europe, or to the time that has passed since Theodosius ruled the Roman Empire. This degree of antiquity that we have to show is enough in this Western hemisphere to give the grace and dignity of age, to make us cherish our Society not only for what it is, but for what it has been, and to prompt for it an attachment akin to the "love far-brought from out the storied past." I envy not the man who is indifferent to such associations or who is so engrossed with the interests of the present that he will not pause at times to listen to the voices which come echoing along the years and telling us how others in the past were actuated by the same hopes, warmed by the same attachments and stimulated to the same endeavors which now inspire and occupy ourselves.

While days are measured and determined by the revolutions of the earth, months by the circling courses of the moon and years by the sweep of our planet in its orbit around the sun, yet a century is an arbitrary term as far as astronomy is concerned and has nothing answering to it in celestial mechanics or topography. The region in indefinitely extended space in which the solar system finds itself at the beginning of any century is not appreciably different from that wherein it was one hundred years before or wherein it shall be one hundred years afterwards. And yet how strong is the appeal to the imagination, and especially to the historic imagination, which is made by the contemplation of one hundred years. I do not mean merely the thought of any space whatsoever of that duration, for in this sense every year witnesses the close of one century of time and the beginning of another,

but the contemplation of periods determined by those centurial years, such as the one we are approaching, wherein a mark of time is changed and we pass from one long-familiar notation to another the ending of which we shall not see.

It would seem, indeed—at least in these latter centuries—as if the courses of human affairs and of historical developments sympathized with this instinctive feeling of the human mind or, at least, added to its force, so often has it happened that the terminal periods of those centuries have been turning points of time and have been packed with events struggling to their birth in a new and hitherto unknown order of things affecting the destinies of men and nations. The last decade of the fifteenth century witnessed the discovery of this Western world and the establishment here of the once mighty power of Spain. The latter years of the sixteenth century saw the first great repulse of this power by our own Anglo-Saxon race, and saw, too, in “the spacious times of great Elizabeth” the dawning in England of that liberty which replaced the despotism of the last Plantagenets and the earlier Tudors. Just one hundred years from the time of the Armada constitutional government was at last firmly established in England as against personal rule. Still another hundred years passed away, and the end of the eighteenth century saw in the successful administration of the first President of the United States the completion of the work in which our forefathers struggled and fought, and it saw also the outbreak of those convulsive forces which constituted the French Revolution. And surely these penultimate years of the nineteenth century must be regarded as fraught with their full share of importance, witnessing as they have done the final and not unpathetic leave-taking by the chivalry of Spain of this Western world which it had brought to the knowledge of mankind; witnessing also great events which shall lead to the extension of civilization throughout the entire length of darkest Africa from Cairo to the Cape: and yet to witness that splendid effort in the annals of the world—if only an effort, yet how great an event—*faus-*

tum sit felixque—the assembling of the Peace Congress with the object of giving rest to the peoples of the earth, so that “nation shall not lift up a sword against nation, neither shall they learn war any more.”

And as it is with the affairs of nations so also in the comparatively restricted fields of labor in which classes of men are severally engaged, they are instinctively led, if thoughtful at all, if “made with large discourse, looking before and after,” at such epochs as the close or the beginning of a century, to sum up what has been gained and to forecast what may be expected and hoped for.

It may be safely said that throughout the whole duration of medicine as a science studied or as an art practised among men no period can be compared as to the number and the importance of its achievements with the century the close of which we are celebrating. Whether by small and gradual gains or by great and sudden accessions of knowledge, the medical science of today is so vastly in advance of what it was when this Faculty was founded that the difference is to be measured not by years only, but by a complete revolution both in our modes of dealing with disease and in our very conceptions, in many cases, of what disease is. Dating from a point long subsequent to the foundation of this Faculty, how many advances have been made in the medical sciences themselves and in all branches of science bearing upon the practice of medicine. What precision in diagnosis has been attained; what extended knowledge of physiology and of animal chemistry has been gained; what additions to therapeutic resources have been discovered—in a word, what increase in definiteness of medical aims and what enlarged power of accomplishing those aims have resulted from the studies and labors of the last fifty years.

If we begin with a point almost exactly coincidental with the establishment of this Faculty a century ago, and come down the years, we find at successive intervals periods at each of which some important discovery has been made or some great advance in medical knowledge accomplished. The first of these, starting at

the point indicated, is Vaccination. It is true that some of the observations and experiments from which Jenner drew his great philosophical deduction had been made previously to the last decade of the last century. A popular, local belief existed that cowpox in some way and sometimes gave protection against smallpox, and in accordance with this belief there had been some cases of deliberate and successful vaccination. But it was Jenner's task to systematize the grounds of this imperfect and confused belief and to establish his great achievement upon the basis of extensive and accurate study and experiment. "The result of a casual and chance observation by certain peasants," it has been said, "was gradually matured into a rational and scientific form by a mind deeply imbued with the best principles of sound philosophy." The first edition of Jenner's "Inquiry Into the Causes and Effects of Variolae Vaccinae" was published in London in 1798. In the following year, that of our own foundation, the practice of vaccination began to spread throughout Europe, and in 1800 it was introduced into the United States.

"Boston and Baltimore," it has been said, "are rivals for the honor of establishing vaccination in America."

On the 8th of July, 1800, Dr. Benjamin Waterhouse, then professor of medicine in Harvard University, vaccinated his own family. In the same summer Dr. John Crawford of Baltimore, a member of this Faculty, obtained vaccine virus from Dr. Ring of London and used it successfully here. In the spring of 1801 Dr. Waterhouse obtained his second supply of virus, and in the same spring Dr. James Smith of Baltimore, also a member of this Faculty, got his first supply, and, beginning the use of it here on the 1st of May, 1801, he was actively engaged in extending it over the whole of the United States; but its employment by President Jefferson in Virginia and other Southern States, by Dr. Coxe in Philadelphia and Dr. Seaman in New York were all subsequent to its use in Baltimore by members of this Faculty.

The large majority of persons familiar with present conditions, but wholly ignorant of those which existed previously

to Jenner's great discovery, are unable to appreciate the grandeur of his work. Its value has been challenged and denied even by some who, as regards other questions, would seem capable of weighing evidence, but in this are unable, or unwilling, to estimate duly the evidential value of facts which are simply immeasurable in their multitude and overwhelming in their cogency.

It is remarked by a learned English historian that "if a modern traveler could find himself transported to the streets of London as they appeared in the early part of the present century (and in the last) it is probable that no peculiarity of architecture, dress or behavior would be to him so strikingly conspicuous as the enormous number of pock-marked visages he would encounter among the people at every turn. * * * That disease over which science has since achieved a succession of glorious and beneficent victories was then the most terrible of all the ministers of death. The havoc of the plague had been far more rapid, but the plague had visited our shores only once or twice within living memory, and the smallpox was always present, filling the churchyards with corpses, tormenting with constant fears all whom it had not yet stricken, leaving on those whose lives it spared the hideous traces of its power, turning the babe into a changeling at which the mother shuddered, and making the eyes and cheeks of the betrothed maiden objects of horror to the lover."*

Such is the picture, drawn by an acute and fairminded thinker and observer, of the evils from which Jenner wrought a great deliverance. What Jenner claimed was, to use his own words, that "vaccination duly and efficiently performed will protect the constitution from subsequent attacks of smallpox as much as that disease itself will. I never expected it would do more, and it will not, I believe, do less." The experience of a century has fully established the truth of Jenner's prophecy, and at this time when fanatics are striving to undo his work and to place mankind where they were before his day, when they have just succeeded in having repealed the legislative enactments for the

*Macaulay: History of England, Vol. IV, p. 200.

systematic enforcement of vaccination made by the British Parliament in 1871, it behooves us to keep in mind for ourselves, and to make known to others, the great facts bearing upon the question which we know to be true and which cannot be gainsaid; such a fact, for an example of many that might be adduced, as that whereas in the ten years from 1771 to 1780 the annual deaths from smallpox in England were 5020 for each 1,000,000 of the population, in a like period of ten years after the enforcement law was passed, from 1883 to 1892, the deaths from the same cause for each 1,000,000 were reduced to seventy-three. And when it is considered that notwithstanding the best efforts some persons, through perversity and ignorance—their own or their advisers—have always succeeded in evading and escaping the operation of the law, it may fairly be held that were it fully applied the disease would be utterly abolished.

If we apply the annual death rate from smallpox as it was in England previously to the discovery of vaccination to this city of Baltimore, with its 500,000 population, as it would be without the protection of vaccination, there would occur, according to a fair estimate, an annual mortality here from smallpox of 2500. This does not include the still larger number who, escaping with their lives, would be left blinded or hideously deformed. The victims doomed to death would be fifty in every week. What is the actual fact? The actual fact is that there has been but one single death from the disease here in more than two years and that death occurred in an unvaccinated child.

These great changes have been wrought by the clear intellect and arduous labor of one man. What has been his reward? He was misrepresented, falsified and traduced by many of his contemporaries, as he has been by others since their day. His reward has not been found in the loud voices of popular applause, for untold multitudes whose lives he has saved have never known his name. Nor has it consisted in monuments of brass or marble, for, although "after considerable difficulty," as his friend and biographer pathetically said, "a statue of

him was placed in the Cathedral of Gloucester," that county in England which was the scene of his beneficent labors, yet another statue erected to him in Trafalgar Square, London, was removed (whether ever replaced for very shame I do not know) to make room for that of a successful soldier whose laurels were won, not *ob cives servatos*, but on fields red with slaughter. In such wise was his work required. Was it not indeed a monumental instance of ingratitude? And yet how far above the reach of all obloquy and detraction is the glorious fame of the great discoverer of vaccination; how safely is his work garnered up in the great treasure-house with the deeds of all the good and just; and how surely among the benefactors of humanity and amid the constellations of science will the name of Edward Jenner shine on as "the brightness of the firmament and as the stars forever and ever."

The next of the great advances in medicine of the first order belonging to this century is due, like the one just considered, to the philosophical intellect, the acuteness of observation and the patient labor of one man. I refer to René Théodore Laënnec, and I think it may be said without the least exaggeration that in the entire range of all branches of knowledge there is no more remarkable illustration of human ingenuity—nay, more, of human profundity of thought, of human power of deducing the deep unknown from the superficial known—than is afforded by that science of auscultation which sprang forth almost perfect and complete—and there is the wonder of it—from the brain of one man, from the brilliant genius of Laënnec. It is a science which has converted previously unheard, unheeded and confused sounds into an articulate language, speaking with logical precision and conveying truth with the certainty of mathematical demonstration. It was remarked by Rokitansky that "had Laënnec done nothing else for medical science his discovery of emphysema and of the causes giving rise to it would have been sufficient to render his name immortal." But important as this contribution to medical knowledge was, it was a small and very limited part

of Laënnec's great achievements. There are, as is well known, passages in the writings of Hippocrates which show that he had practised the application of the ear to the chest in conditions of thoracic disease, but his use of the method was very limited and led to no certainty of diagnosis. It may be said, too, that very many centuries after Hippocrates the treatise of Avenbrugger, "*Inventum ex percussione thoracis*," had been published in 1761. But though, when translated by Corvisant forty-seven years later, this may probably have suggested Laënnec's work, it can hardly be regarded as having any closer relation to the full establishment of auscultatory diagnosis as a complete scientific system by Laënnec than the voyage of Eric the Red to Greenland in the tenth century had to the great discovery of Columbus 500 years later. He is the true discoverer who makes his discovery known. The historians of astronomy tell us that the conception of gravitation among the celestial bodies was formed before Newton, whose office it was to collect the vague ideas of others to prove and blend them together with a mathematical power at that time unequalled. In like manner, whatever in the same line of thought may have gone before, it is to Laënnec's genius that the world owes a diagnostic method which is as powerful and as accurate a solvent of previously insoluble problems as the calculus is in the realm of mathematics.

In February, 1815, Laënnec communicated to the Société de l'Ecole his first results in auscultatory diagnosis. On the 30th of April following he read another paper on the same subject before the same body, and on May 15—an illustrious day in the history of medicine—he made his first essay with the stethoscope. April and May, 1815—memorable months for far different reasons of a most memorable year. Consider the contrast between the events of the outside world at this time, when the embattled armies of Europe were marshaling for the tremendous struggle which in a few weeks was to find its close in the carnage of Waterloo, and, on the other hand, the work of the quiet student within the wards of the Beaujon

labors, constant in his duty, devout, as we are told he was, in his religious faith, strict in his adherence to the Catholic Church of his native land, bent only on the acquisition of knowledge which should lessen human suffering and save human lives. For in civilized nations there are comparatively few persons who have not at some time, and many of them many times, received the boon of health or the boon of life from knowledge contributed to mankind by Laënnec. Ponder the contrast between the two scenes—the one familiar to all men, the other never and Necker hospitals, earnest in his thought of:

"Of two such lessons why forget
The nobler and the better one?"

"Hereafter," says Señor Castelar, "the world will care more to know who gave man eternal light by the striking of the flint and steel, bringing him forth from the obscurity of his cave; to know who yoked the ox to the plow that the earth might give forth bread and wine; to know who brought quinine, the remedy for our fevers, from another hemisphere to our own, than to know who the warrior was whose helmet, steel cuirass, sword, spurs and whip plainly show that he is to be inscribed among conquerors; that he is responsible for all sorts of violence; that he is to be classed among the enemies of liberty and the persecutors of humanity; whose place is not among the redeemers."

Ponder, I repeat, the contrast. It is like the difference which exists between the confusion, turmoil and strife of the "corrupted current of this world" and those blessed ministrations of good which may engage the serene and beneficent intelligences beyond the veil.

The fourth decade of this century was distinguished by an achievement of the first rank as to its importance in pathological science and as to its bearing on the treatment of diseases of very frequent occurrence. I refer to the great work of that illustrious physician, Richard Bright. As in the cases already spoken of, there were foreshadowings of the results of Bright's labors before his day, which, though valuable in their time, were faint and comparatively unimportant, and were completely effaced by the light following

them. Bright's first work was given to the profession in 1837, and twenty years earlier Blackall had described the detection of albuminuria by chemical tests. But for the respect which is always due to the earliest rays of light shining into a surrounding darkness, and but for the sense of thankfulness which they prompt, we might almost smile at some of his utterances which appear such truisms to us, as when he remarks that "Van Helmont in his chapter on Dropsy has even pronounced the seat of this disease to be the kidneys themselves."

But Blackall's line of investigation stopped far short of the point which showed the relation of dropsy to organic renal disease; still less did it show the essential pathology of nephritis and the various forms in which it occurs, or lead to any really valuable therapeutic measures. We are all so familiar now with conditions which have been made plain and easy to understand by the diagnostic measures of Laënnec and by the pathological researches of Bright that it is hard to realize what our feelings would be when confronted with such cases if the work of Laënnec and Bright had never been done. Consider the position of our predecessors in the last century—to go no farther back—and in the earlier part of the present before that work was done. How inevitably must certain affections of the chest, bearing some resemblance to each other, but wholly unlike in the pathological conditions involved in them and in the treatment which they required, have been constantly and necessarily mistaken for each other, and often, no doubt, with disastrous results. How impossible, for example, without the aid of auscultation must it have been in many cases to determine whether pneumonia or pleural effusion, whether hypertrophy or dilatation of the heart existed, and yet how wide is the difference in the treatment to be adopted accordingly as one or the other of these affections is present. Remember that at the time referred to the mode in which dilatation occasions cardiac dropsy was wholly unknown, as were also the manner of detecting such dilatation, and the marvelous powers of digitalis and iron to retard or relieve it.

Remembering these things you may form some idea of the state of mind of the practitioners of those days, and the very best of them, when they encountered conditions which to us present the easiest of problems. Groping blindly in the dark without guides, knowing of dangers with which they had to deal, but not knowing where they lay or whence they sprang, they were entangled in a perplexity involving the dread issues of life and death. In their fears and misgivings they may almost without exaggeration be likened to Dante when he found himself wandering in the mazes of the gloomy wood:

"Even to tell
It were no easy task, how savage, wild
That forest."

If you would seek a further and a local parallel in the realm of imagination, strive to picture to yourselves the scene which would be presented if all the temples of religion, the schools of literature, art and science, the marts of trade, the memorial monuments and the countless homes which cover and adorn the hills of this fair metropolis of Maryland were blotted out and replaced by the trackless forests and the waste wilderness which once were here. Do this, and you will have no inadequate figure of the tasks with which our forefathers had to deal. But from this obscurity and perplexity the medicine of today has wholly emerged, and among all its achievements none rests upon a firmer basis of scientific accuracy than the diagnosis of the causal conditions producing the various dropsical effusions. And along with this increased knowledge of the true nature of these maladies there has grown up a vastly enlarged power of relieving them, so that in some, the dropsy of acute tubular nephritis, for example, attended perhaps with a pulmonary edema imminently threatening life, there will result from proper treatment a perfect recovery, with entire restoration of function and structure, and in others, not admitting of such complete cure, great alleviation of distress and prolongation of life may yet be effected.

The decade of this century immediately following that of Bright's first work, the

period, that is, between 1840 and 1850, constituted the splendid era of the discovery and the practical application of anesthetics. These have drawn as deep a line of demarcation between the present and the past as any discovery ever made by our science or by all sciences. Nothing ever known among men has gone so far in the fulfilment of the blessed prophecy still awaiting ultimate completion—"Neither shall there be any more pain, for the former things are passed away." Into the controversy whether Dr. Jackson or Dr. Morton, both of Boston, is entitled to the distinction of being the discoverer of the anesthetic power of ether it is impossible now to enter. Let it suffice to say that the first operation ever rendered painless by ether was performed by Dr. Morton on the 30th of September, 1846, and on the 16th and 17th of October of that year Dr. Warren and Dr. Hayward of the Massachusetts General Hospital made the first public use of ether in surgical operations. In the following year, 1847, Dr.—afterwards Sir James—Simpson of Edinburgh satisfied himself by many experiments as to the power and value of chloroform as an anesthetic and gave his discovery to the profession and the world.

It is, however, not only the mere obliteration of pain under conditions in which it would be most acute and most appalling that is accomplished by anesthetics, but, besides this consideration, vastly important as it is, the use of these agents makes surgical aid feasible, and indeed easy, for troubles which could not be dealt with or reached without them.

The discovery of anesthetics is then one of the causes to which the rapid advances and wondrous achievements of modern surgery are due. Another cause is found in the rise and development of bacterial pathology. In this field a large number of able and earnest workers have been engaged—Pasteur and Koch and Eberth, Fraenkel, Friedlander, Lister, Klebs, Loeffler, Pfeiffer, Haffkine and others—who have demonstrated the bacterial causes of some most important affections, such as tuberculosis, cholera, typhoid fever, pneumonia, diphtheria, influenza, plague and some others.

Further investigation and experimentation along the lines which they have laid down is very sure to lead to improvements in the treatment of these affections, such as has already taken place in so conspicuous a degree in the case of diphtheria. Important as this system of pathology is in surgery, it is no less so in medicine, whether in the study of causation or for the purpose of diagnosis, prognosis, treatment, or, best of all, prevention of disease.

The story of the discovery of the various forms of organisms productive of disease—micro-organisms, or microbes, as they are called—is one of the most interesting as it is one of the most surprising chapters in the history of science. That there are harmful agencies in nature was, of course, a familiar thought—such agencies as the deadly poison of strychnia and aconite, which yet, from a medical standpoint, have "a soul of goodness in things evil;" the venom of the cobra, the ravaging tooth of the tiger, the lightning and tempest. But it was a new thought that men are surrounded by all-pervasive, subtle, mysterious energies and agencies of evil, which are found to be the causes of manifold and most perilous diseases. New—and yet perhaps not wholly so; for possibly they are not altogether fanciful who have found in the bacterial pathology of our day the revival and the establishment upon a scientific basis of direct observation of the teaching of an ancient school of medicine which held that many maladies were caused by evil agencies entering the body from without. Whether *daimones*, demons, as they were then called, or bacteria, as we know them in modern phrase, is perhaps a question of terms only. But it is certainly curious to note how some of the characteristics of the bacteria correspond with those spoken of in old books and commonly regarded as belonging to the *daimones*. Thus, in view of their almost infinite multitude, they may be called legion, for they are many. Powers they are of tremendous potency. Witness the fearful ravages of tuberculosis, of cholera, of plague, of smallpox already referred to, of typhoid fever, of diphtheria, of scarlatina, of meningitis and others still. And though we

may not term them malevolent in themselves, yet surely they are maleficent, and "powers of the air," for they inhabit and traverse it and are borne by it—some of them at least—upon their evil missions; "powers of darkness," too, for many of them, the existence of which on grounds of analogy we know, are involved in as yet unpenetrated obscurity, from which others, touched by the Ithuriel's spear of science, have been dragged forth, revealed in their true nature and happily often robbed of their power for harm, as in the coming century will surely be the case with others of the evil brood.

The splendid victories of modern surgery are due, then, chiefly to these two things—the discovery of anesthetics and the rise and development of the bacterial pathology, with its corollary, antiseptics. And the magnificence of these victories—who can compute?—whether they be estimated by the restorations which they have accomplished from imminent peril or certain death to health and vigor and all that gives value and sweetness to life—the recall from the very verge of the grave to "the warm precincts of the cheerful day"—or estimated again by the aggregate of time added to human lives, which on the most moderate calculation of the multitudes of those restored, their average age and their fair expectancy of life, is without doubt to be numbered by hundreds of thousands of years.

But, speaking from the standpoint of the physician, trusting that I may not be regarded as too much

*"Like the dyer's hand,
Subdued to that it works in,"*

holding the labors of my colleagues, the surgeons, in the fullest measure of honor which they so eminently deserve, I would yet enter this plea in behalf of modern medicine, that the work of surgery would not be what it is without the aid of those purely medical appliances, anesthetics and antiseptics. The handwork, the chirurgia, the surgery, would be the same or nearly so, but the winning of the day is from the alliance with the auxiliary forces of medicine.

Within the domain of medical practice itself these same agents are of equal importance as in surgery, and to them are

to be added numerous therapeutic resources wholly unknown in the last century and many of them not known until comparatively a few years ago. Among them are the bromides in neurotic diseases, arsenic in pernicious anemia, the salicylates and the alkalies in rheumatism, the skilled use of digitalis, which has in such great degree superseded its former empirical employment; the antitoxine treatment of diphtheria, the hydro-therapeutic treatment of typhoid fever—these are some of the advances made in modern medicine. And there is the power of the hypodermic needle in calculus, hepatic or renal, and the other manifold forms of pain—how truly it is, in the words of an old tragedian, "the sleep-giver to suffering mortals." There, too, is the amyl-nitrite, bringing instant relief even in the supreme agony of angina, that pain which seems not of the body only, but of the very spirit itself, to which we may perhaps apply the words of that great master of the English language, Cardinal Newman—

*"That sense of ruin which is worse than pain;
That masterful negation and collapse
Of all that makes one man"—*

and yet under this assuaging balm it passes away and the spirit is at ease.

These are some of the gifts which the medical and surgical science of the nineteenth century lays down as its tribute at the feet of humanity. And they are all good gifts. Other sciences have in the same time made great advances, more brilliant perhaps, more striking to the imagination than those of medicine. But in themselves they are in many cases ethically indifferent, having no moral bearing whether towards good or evil. In fact, some of the greatest discoveries and gains in knowledge made by men are capable of perverted use. The printing press itself, or, going far back of that, "the letters Cadmus gave," infinite as are the blessings they have bestowed, have yet been only too often instruments of evil. It is an excellent thing to be able to cross the ocean in five days, to traverse the land at the rate of a mile a minute, to converse at the end of a wire with Chicago or Duluth, perhaps soon with Hawaii or Manila. But steamships may transport mission-priests and Bibles, or,

on the other hand, Maxim guns to oppose bows and arrows; telegraphs and telephones may transmit messages of mercy and good-will, or, again, they may promote stock gambling and deliver consequent maledictions. Phonographs may store up and pour into the ears of future generations the lessons of the greatest divines and the greatest statesmen, of a Liddon and a Gladstone, or they may utter the ribaldry of the demagogue or the atheist.

But the objects of medical art and science, and the results which they accomplish, are wholly good and good alike to all. What though they are bestowed equally upon the wise and virtuous as upon the idle and profligate—they are in this only like the blessed gifts of the sun, which riseth on the evil and on the good, and the rain which is sent on the just and on the unjust. All are partakers of their bounty and from none is their hand withheld. Their whole purpose towards mankind is that they may have life and that they may have it more abundantly.

The things which have been accomplished in the medical sciences during the last one hundred years thus cursorily reviewed are the promise and the earnest of still better things which the coming century will see. Though much has been accomplished, much remains to be done, and the attainments of this present time may hereafter seem but faint beginnings in comparison with what will then have been achieved. A broader light will surely illumine much that is now obscure. More delicate methods of investigation than any we now possess will foreshadow impending diseases or detect them at earlier and more remediable periods of their courses. The poisons by which "the life of all the blood is touched corruptibly" will be more thoroughly known and more effectively guarded against, expelled or neutralized by their own antitoxines. Epidemic diseases, the nature and origin of which are involved in obscurity, the pestilence that now "walketh in darkness," will be set in clear light to be blotted from the sum of human ills forever. Anesthetics, which shall charm away pain without any jeopardy to life, will then be known. The

great subject of neuro-pathology, now almost in its infancy, will be developed far beyond its present limits, not only through increased knowledge of the special functions of different portions of the brain, but by the power which may then be possessed of tracing the earliest disturbances in vascular and glandular action to altered innervation.

Of some of these things we are on the verge, and many others will assuredly come of which we now hardly dream, but which will be acquired by the faithful pursuance of methods like those now used.

Another hundred years will roll away; another centennial of our Faculty may be celebrated, and if at that time those of the present day shall be regarded as

*"The ancients of the earth,
And in the morning of the times,"*

it will yet be looked back upon as a morning not clouded over with the mists of error, prejudice and superstition, but bright with the radiant promise of those good things which then will be living realities.

Let it be remembered always that the gains to medicine, whether in the way of therapeutic resources or improvement in diagnostic means or in wider pathological knowledge, have been contributed by those who have been or are themselves workers in medical science or in the allied sciences. In no single case has anything of value been supplied to it by any system of charlatanry or by any heretical school which has sought to raise itself into rivalry with legitimate medicine. As it has done in the past, so in the future medical science will continue to use and appropriate to its purposes all contributions which may be supplied to it by chemistry, biology, electricity and other departments of advancing science; but the peculiar, the proper work of medicine is the study of disease and the application of remedies.

On its theoretical side it is engaged always, to use Milton's noble words, "in seeking the bright countenance of truth in the pure air of delightful study," and on its practical side in giving relief to the suffering and, so far as in it lies, deliverance and safety to those who are ready to perish.

Fellow-members of this Faculty, let us pledge ourselves and those who shall succeed us in the coming century to more and more strenuous and faithful work in our calling, and let us be thankful to God for having given us the privilege and the blessing of being engaged in its labors.

Historical Department.

Under direction of EUGENE F. CORDELL, M.D.,
Author of "Historical Sketch of the University
of Maryland" and Editor of the "Centennial
Volume" of the Medical and Chirurgical Faculty.

IV.

THE FOUNDERS FROM THE EASTERN SHORE OF MARYLAND.

MORGAN BROWNE.—Dr. Browne was the eldest son of Joseph Browne, a farmer of Quaker Neck, Kent county, Maryland, where he was born in 1769.* He was educated at the Free School in Chestertown and at Washington College, but did not graduate. Upon the completion of his classical course he entered the office of Dr. Edward Worrell as a student of medicine. Here he became associated with several other young men engaged in the same pursuit. Being the oldest of these he was frequently called to the bedside of the sick in the absence of his preceptor, and such were his prudence and tact that although but a tyro he won golden opinions. In the fall of 1790 he entered the University of Pennsylvania. Near the close of the course, in February, 1791, a general inoculation was practiced in Kent county, and he was summoned home to assist before he had received his diploma, the M.B. degree, which was then given after one session.† He did not return, for, being taken into partnership with Dr. Worrell, he entered at once upon a large practice. Having a strong taste for

study, he lost no opportunity to improve his mind and add to his knowledge. He continued in the laborious work of his profession, taking the entire business on the death of his preceptor, until 1841, when he had a severe attack of typhoid fever, which broke him down both in mind and body. He died a year later, aged seventy-three.

Dr. Browne was about five feet nine inches in height and very neat, but not showy, in his dress. In early life he was accounted very handsome. We have the evidence of Dr. Wroth that he was good-looking even in advanced life. He was noted for his excellent judgment. "In my whole life, now extended to seventy-six years," says Dr. Wroth, "I have known no physician of more matured judgment." He took a warm interest in the politics of the day, being an adherent of the Federalist party. A small profile picture of Dr. Browne is in the possession of the Medical and Chirurgical Faculty, having been presented by his niece, Mrs. William Ringgold, through Dr. Hines of Chestertown.

JAMES DAVIDSON.—The family of Davidson sprang from a powerful clan in the highlands of Scotland known by the name "Clan Chattan," the records of which begin in the twelfth century. One of this line was George Davidson, magistrate of Aberdeen, Scotland, who had one son, James, the founder and subject of this notice. Dr. James Davidson was born in Aberdeen in 1743. He attended the Royal College in that city and received the degree of M.D. therefrom, his diploma bearing date 1769. In 1771 he came to America, settling and practicing at Queenstown, Queen Anne's county, Maryland. He was twice married, first to Elizabeth, youngest daughter of Philemon Charles Blake of "Blakeford," in the same county, by whom he had one son, George, and one daughter, Elizabeth. His first wife dying on the 23d of November, 1802, he married on the 18th June, 1804, Mrs. De Courcay of "My Lord's Gift," near Queenstown. By her he had one daughter. He died in June, 1811, and his remains were interred at "My Lord's Gift." The only public position which Dr. Davidson is recorded to

*This is Dr. Wroth's statement but in the *Maryland Herald and Eastern Shore Intelligencer*, published at Easton, I find a notice of Morgan Browne, Administrator of Morgan Browne lately deceased, of Kent Co. This was dated April 14, 1802.

†It was dropped entirely after the session of 1790-1791.

have filled is that of attending physician to the Queen Anne's County Almshouse, 1792-1804. The diploma of Dr. Davidson (recently on exhibition here) is the only one I have ever seen from Aberdeen. It is written on parchment and is signed by Alexander Gordon, "Baronetus, M.D., Professor et Decanus," and others. By it the degree of M.D. is conferred upon "Dominus Jacobus Davidson."

ARNOLD ELZEY.—Dr. Elzey was born in Somerset county, Maryland, in 1758. His ancestors were English. One of them was a colonel in the British army of the same name.* Dr. Elzey resided later in life in Montgomery county, Maryland, moving finally to Washington. During the last war with England he offered his services to the government and was accepted, receiving an appointment as medical officer, U. S. A., April 15, 1814. In April, 1816, he was made post surgeon and was assigned to duty in Washington. He continued in this office until his death, which occurred in that city on the 6th of June, 1818. Dr. Elzey was the physician of President Madison and had considerable practice among persons connected with the government. He was vice-president of the Medical Society of the District of Columbia at the time of his decease. His last illness was short and painful.

Of THOMAS S. FOSSETT, all the information I have is that he died in Worcester county in 1847.

Of ROBERT GEDDES of Kent county I know nothing.

HOWES GOLDSBOROUGH of the well-known family of that name of the Eastern Shore was descended from Nicholas Goldsborough, who was born in England in 1640, married Margaret Howes in 1659, and emigrated later to Maryland. He was born in Dorchester county, Maryland, November 20, 1771, being the son of John and Caroline Goldsborough. He married Miss Mary McMullan of Duck creek, near Smyrna, Del. He seems to have resided for a time in Frederick county. He held the office of clerk of Dorchester county court, and died in that county October 20, 1804.

*Many of the readers will doubtless remember the curious portrait of him by Sir Peter Leby, recently on exhibition.

ROBERT GOLDSBOROUGH of the same family as the last was born at "Four-Square," the family estate in Talbot county, Maryland, December 4, 1772. Of his early life and education I know nothing. He was president of the Faculty from 1826 to 1836. He died at his residence in Centreville, Queen Anne's county, Maryland, on the 30th September, 1849, having practiced there for more than forty years. He was an old-fashioned gentleman, very fine-looking, precise and prim. He drove a chaise and dressed in the old style.

JOHN GROOME of Elkton, Cecil county, was a medical pupil of Dr. Edward Worrall of Chestertown, Md. Visitors to the late-exhibition will recall a very interesting faded water-color profile of him, representing him with straw hat and standing collar. A letter from him was also shown. It was dated at Elkton, June 15, 1824, and was addressed to Mr. John C. Groome, Litchfield, Conn. I give the following extract from it, which, with the above, is all that I have been able to gather of Dr. Groome: "I have the satisfaction to acknowledge the receipt of three letters from you since you left Philadelphia—one from New York, New Haven and Litchfield—all of which tended to relieve our minds about you, as the bursting of the boiler of the steamboat, etc., had produced a little anxiety. All of them were very satisfactory, more especially the latter, as it communicated to us a knowledge of the present state of the country over which you traveled, as well as a history of the town of Litchfield, its inhabitants, manners and customs, etc. Your uncle, Samuel, called here last week and was extremely pleased indeed at a perusal of your letters. He observed you promised to write to him occasionally, but he had not yet received a letter. He brought down with him a very splendid gig and horse, which he purchased in Philadelphia, and has promised to be up here about the first week in next month to take Eliza down to spend a month with him. At present he says the strawberries and soft crabs are in abundance. Since I left Philadelphia I suffered a good deal with a dyspeptic stomach, which has pulled me down a little and brought on

my usual complaint of hypo[cho]ndria. For a week past I feel as if I was mending, and if I could only get hold of a handful or two of the L'argent I would soon get well. Col. Veazey by letter has notified me and my family to attend on this day two weeks, the 29th inst., the consecration of their new church by Bishop Kemp, which probably I and Eliza will obey. By the Elkton Press, which Mr. R. V. Cost says he regularly has sent you, you will find the people are very much divided as to the celebration of the next Fourth of July. No less than preparations for three separate dinners are announced. I don't know whether I shall dine out at all this year for the first time for thirty years past. I enclosed you the American, giving an account of the death and funeral of Genl. Winder, which I supposed came to hand. * * *

"Yours affectionately,

"J. GROOME."

Of ELISHA HARRISON I have only been able to learn that he was born in Cecil county in 1762, that he was a surgeon in the Revolution, settled after that struggle in Washington, was a founder of the Medical Society of the District of Columbia in 1819, and died in Washington on the 24th August, 1819.

DR. EZEKIEL HAYNIE was the son of Samuel and Judith Haynie. He was born in Northumberland county, Virginia, September 29, 1750, but moved with his parents in early childhood to Salisbury, Md. Here he was educated and began the practice of medicine. During the Revolution he became surgeon's mate in the Maryland Line, a position which he seems to have held from 1781 to 1783. On the cessation of hostilities he settled at Snow Hill, Worcester county, Maryland, and practiced there a short time. He then moved to Princess Anne, Somerset county, where he acquired a large and lucrative practice and where he continued to reside until his death in 1803. Dr. Haynie married Bettie Bayly, daughter of Esme and Linah Bayly. Of the children of this union two daughters alone lived to maturity and married. At the recent Centennial two letters were shown written by Dr. Haynie from Princess Anne to his brother, Dr. Martin L. Haynie, at Ches-

tertown. Both are in a good, readable hand and neatly and carefully executed. The style, etc., shows that the writer was a scholarly person. The first is dated 8th February, 1799, and gives some of the Doctor's views upon practice. "Bleeding at first in all diseases attended with severe and fixed pain I think a remedy much to be relied on. We can never say the experiment of it has been fairly made unless the quantity is in proportion to the violence of the case and continued till a considerable degree of debility ensues. From the success of it in this way for some time past in my practice I am inclined to think it is seldom in the common way carried as far as it deserves, though I am not yet so much wedded to this remedy as to extend it to diseases unattended with evidence of inflammatory action. Blistering never comes amiss in rheumatic cases, unless where the disease consists rather in a general diathesis than in local inflammation. When it only shifts the seat of the pain without removing it, it is now a constant rule with me to re-apply as fast as the sores dry up till the pain is subdued. Where there is little or no fever general remedies seem to have little effect. Sudorifics and anodynes, however, afford in some cases considerable relief. I use Dover's powder, etc." The second is in reply to his brother's request to be furnished with his "rates of charging." In it he speaks of his "small stock of medical ideas." For a visit in town to one not a customer "3/9 in day;" "out of bed in night, 7/6." "In the country under five miles 7/6 and so on. After twenty the proportion of charge to distance is increased, as long absence from home and from neighborhood custom is both disagreeable and disadvantageous. All-night visits double, and bad weather is a good reason for additional charge. Detention beyond the time necessary to examine the case and give directions is also a good ground of charge." Then follow charges for various kinds of medicines, etc. "Vs. in arm, 3/; extracting teeth, 5/; opening abscess, about 3/9; reducing fracture or dislocation of ye large bones, £3 to £5; consultation with one or more physicians a guinea; conference with do. [a nice distinction—applied to lighter

cases] about 7/6 to 17/6." He adds that these charges are "as low as the common and much below many in our part of the country." "For administering glyster, 5/," etc.

WILLIAM HAYS was a representative of Dorchester county, and HENRY HELM is credited to Denton, Caroline county, Maryland.

JOHN HUSTON of Worcester county was born February 20, 1768. He married Sarah Dashiell December 3, 1800, by whom he had four daughters but no sons. He died at Salisbury, Somerset county, Maryland, January 23, 1828. Mrs. Belle H. Jones, his granddaughter of Salisbury, sent a silhouette of him to the Centennial for exhibition.

NOTES ON RECENT SCIENTIFIC LITERATURE.

*By William Lee Howard, M.D.,
Baltimore.*

VI.

It is impossible for any thinking man to write upon a subject dealing with the many perplexing problems of our existence and the moral and social habits which ever control our actions without entering boldly and plainly upon the facts basic as concerns the sexual relation of that existence. This is the apology for continuing the subject dealt with in my last article.

Doctor Woods Hutchinson of the University of Buffalo has just written a small work entitled "The Gospel According to Darwin." It is not my purpose here to collate his ideas and statements regarding religion and science. This is old straw threshed over and over, yet some grains of wheat can always be found even after the last threshing. As Dr. Hutchinson says, "Darwinism has no quarrel with religion—only with its excesses."

I particularly wish to call the attention of the progressive physician to the last three chapters of the book, namely, the tenth, "The Duty and Glory of Reproduction and Economics of Prostitution;" the eleventh, "The Value of Pain," and to the twelfth, "Lebenslust." There are many

whose training and education have been such that they will not agree with the statements and conclusions of the author. There are others, the free-lancers of science, who will rejoice at the unfettered yet moral tone of dealing with unassailable facts. I say "unassailable facts," because the denial of an active sexual life in all strong, healthy men, and the teaching that if such an activity exists it should be forever suppressed, can only come from jejune, ascetic, monastic manipulators or those unfortunates suffering from obscuration of physical facts and incoherence of any past adolescence. "However, between the Pauline attitude and its offspring, the black plague of monasticism, on the one hand, and the Phallic worship, with its Bacchanalian rites, upon the other, there is really little to choose either as to rationality or moral results."

I cannot conceive of men calling themselves scientific physicians and, at the same time, professing to ignore and refusing to enter into the study of what is the basis of all life—morality and religion. Vice and religion, morality and physical disintegration, all, each and every action of mobs and empires, individuals good and bad, the nun and the demi-monde, the priest and the lecherous cenobite, have had but one and the same cause of existence—sexual passion. Except for the normal sexual passions of his parents the purblind morbid moralist and the attenuated preacher of celibacy would not be in existence. Would that the parents of these humiliating bipeds had carried out the advice of their children!

Simply because prostitution is and always has been an institution of society, and in spite of all the ecclesiastical and legal pressure brought to bear upon it, never suppressed, Dr. Hutchinson looks upon it as a necessary evil. He even goes farther, and sees in it an institution having a sociological reason for existing. To quote the author: "To sum up, the whole mechanism of prostitution is an engine of deadliest efficacy in sterilizing and ultimately destroying the worst elements of both sexes. To say that it also involves fearful and widespread suffering and damage to innocent women and children would be as true as it is pitiable and har-

rowing, but I firmly believe that this is much less both in extent and painfulness than is usually stated, and is, from a purely economic standpoint only, far overbalanced by the benefit resulting to the race. 'A companion of fools shall be destroyed' is no vengeful threat, but a simple statement of a stern, necessary natural law. Pain, disease and death are hard to bear and harder to look upon, but they are among the greatest benefactors of the race.

"The only way to check its action is to reduce to its 'anatomically necessary' limits the class upon which it is sure to act. Men should be taught the sacred duty and true dignity of reproduction; that any attempt to avoid this duty brings its own punishment; that their sexual powers belong not to themselves, but to the race, and every exercise of them must result ultimately in either a pregnancy or syphilis; that they cannot hope to enjoy the privileges of manhood and shirk its responsibilities.

"Women should be taught to trust their instincts, for in them the maternal impulse is stronger than life itself; that, like every other natural instinct, it is of highest benefit, not only to the race, but also to the individual; that any attempt to thwart it, or even failure to give it proper development, will result in either dwarfing or decay."

At last we have the subject of bicycling for women collated and condensed in such a manner that one can get a good idea of the attitude of medical men concerning this mooted question. I find this subject dealt with in "The International Medical Annual," 1899, E. B. Treat & Co. I advise those who, like the writer, have been troubled with the conflicting statements of gynecologists and neurologists regarding the baneful moral effects on one side, and the beneficial anatomical results on the other, to read this concise report.

The "Annual" for 1899 is a decided improvement on those which have gone before. Especially marked is this improvement in the medico-legal section and the chapters dealing with sanitary science. The colored plates are superior to those usually found in these annuals, and alto-

gether it is a work valuable for information and necessary as a reference to all those who would keep in touch with the rapid progress of modern medicine.

Society Reports.

BALTIMORE MEDICAL AND SURGICAL ASSOCIATION.

MEETING HELD APRIL 10, 1899.

DR. JOHN R. WINSLOW read a paper entitled "The Tonsils As a Menace to the General Organism" (see page 302).

Dr. E. J. Bernstein: The subject in its terrific aspect is possibly a new one. The wonder is that so many bacilli are found on the tonsil and so few enter the system. This is explained by the phagocytic action of normal mucous membrane. He does not believe that 10 per cent. of tonsils are tubercular. He does not use the finger-nail, or advise others to do so, in removing adenoids. The finger-nail is not clean.

Dr. Randolph Winslow reported two cases of general streptococcic infection entering through the tonsil. In the second case antistreptococcic serum was injected without benefit.

Dr. Morris C. Robins reported a case of streptococcic infection entering through the tonsil that terminated in recovery.

Dr. John R. Winslow: Cases of streptococcic infection involving the pleura and entering through the tonsil are not rare. Quite a number of cases just as severe are due to staphylococcus infection. He always thoroughly cleans his finger-nail before removing adenoids.

Dr. C. Hampson Jones read a paper on "Vaccination and Revaccination." The amount of variola today is insignificant compared with the amount of smallpox before the time of Jenner. Glycerinated virus is preferable to ivory points, because it is decidedly freer from germs. The number of "takes" is the same from both. The apparent periodical visitations of smallpox are probably due to the fact that the effects of previous vaccinations have died out. Revaccination is necessary. He is glad to have a virus (glycerinated) that will not produce the frightful inflammation formerly so frequent. He

advises revaccination every five years.

Dr. E. G. Waters inquired about the strength of different varieties of virus.

Dr. E. Dorsey Ellis: He has always been in doubt as to when a person should be revaccinated.

Dr. E. J. Bernstein: What is the percentage of successful takes in vaccination? Were the different makes of glycerinated virus equally trustworthy?

Dr. A. D. McConachie: On the point of revaccination we are never certain.

Dr. John B. Schwatka: The amount of original scarification accounts for the size of the scar more than the virus used.

Dr. E. G. Waters mentioned the case of a lady, aged 53 years, who was vaccinated by him in 1882. She told him that that was the twenty-sixth time she had been vaccinated with varying results.

Dr. John Neff: He has been successful in using quills without harmful results. He mentioned a family of six children, one of whom had smallpox, and the other five had been vaccinated unsuccessfully. He revaccinated them and it took, but all had mild varioloid.

Dr. D. Z. Dunott: The size of the scar is not proportionate to the amount of scarification.

Dr. James A. Zepp: Is the fever following vaccination the result of the vaccination or of streptococcic infection?

Dr. James E. Gibbons: He has never seen very large scars unless the vesicles were broken. He has never used anything but ivory points, and always with much success. Not every sore arm is a vaccination "take."

Dr. C. Hampson Jones: He declines to state what virus he prefers. All the varieties of glycerinated virus were practically free from germs. He does not know when revaccination is necessary. No scar remains after vaccination with pure glycerinated virus. Most undoubtedly fever does result from the vaccination itself. He takes every precaution when visiting a smallpox patient to prevent carrying the contagion.

The association then adjourned.

EUGENE LEE CRUTCHFIELD, M.D.,
Secretary.

Medical Progress.

PHARYNGITIS AND TONSILLITIS IN INFANTS.—Many attacks in infantile life are thought by Dr. Henry Dwight Chapin to be due to some catarrhal inflammation of the throat, and for that reason he recommends in the Medical News a tongue depressor so curved at its small tip that a satisfactory view of the small throat can be examined. He says, in conclusion:

"To sum up, in order to successfully examine the throat of an infant the parts must be satisfactorily seen at the first examination. By means of the tongue depressor here presented the base of the epiglottis is firmly held at the first attempt and the fauces exposed to view. Pharyngitis and tonsillitis are more common in infants than has been supposed and are a fruitful cause not only of present discomfort, but of post-nasal catarrh in children. Repeated attacks will surely cause enlargement of the adenoid tissue at the vault of the pharynx as well as of the faucial tonsils."

* * *

TUBERCULIN IN THE INSANE.—While the use of tuberculin as a remedial agent has not given very remarkable results, except in the case of skin tuberculosis, its value as a diagnostic medium has been sufficiently proven. Dr. John H. Neff in the American Journal of Insanity speaks of its usefulness in suspected tuberculosis of the insane, who are often not able to give any information as to their condition and in other ways do not co-operate with the physician. From all these reasons, and as a result of his personal experience in many cases, Dr. Neff thinks that the use of tuberculin offers advantages to hospitals for the insane.

* * *

REMOVING EAR WAX.—The Western Clinical Recorder says that cerumen may be quickly and effectually softened by filling the meatus with peroxide of hydrogen and allowing it to soak for a few moments, after which it may be easily removed by syringing with warm water.

MARYLAND

Medical * Journal.

PUBLISHED WEEKLY.

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MARYLAND MEDICAL JOURNAL,

Fidelity Building, Charles and Lexington Streets.
BALTIMORE, MD.

WASHINGTON OFFICE:

Washington Loan and Trust Company Building.

BALTIMORE, JUNE 24, 1899.

It is a great pity that facts allied to medicine and attempts to teach the public should all find a place in the daily papers, and especially in the large Sunday issues, which teem with sensational reports. One paper describes a rather simple case, but clothes it in such remarkable language, and illustrates it with such grotesque figures, that there is no wonder the public is alike appalled and surprised. Then, again, facts which have some foundation may be correctly stated in the paper and yet lead to erroneous conclusions.

The recent statements of Atwater on the amount of alcohol which can be taken in the human system in a healthy condition in twenty-four hours cannot but do harm when garbled by a sensational press anxious to create notice at any cost. The difficult question of the poisonous dose of alcohol in any form has not yet been settled, and the statement that two ounces, more or less, of alcohol or its equivalent may be taken daily with impunity can hardly be accepted at this time without attaching so many conditions that the original

statement can hardly be found. At the same time it is a great pity that the school-books on physiology as used in the schools of Maryland and of other States should be filled with exaggerated statements on the effects of alcohol on the body.

The question of the use of alcohol in health and disease is one which will always be discussed, and is one on which too many have decided opinions, too often extreme. The drinker makes statements which his own physical condition proves wrong, and the total abstainer is equally ridiculous in the other direction. Such questions as the use and abuse of alcohol should be kept from the daily press until they are settled, and the fact that the daily papers are allowed to make statements which may be followed by great harm shows at least in one respect the need of a press censor.

* * *

In the *North American Journal of Diagnosis and Practice* Dr. C. H. Powell has a very sensible article on the mistaken diagnosis, and he very properly insists on the importance of a

Mistaken Diagnoses. correct understanding of the case before prescribing. One physician will accept the diagnosis of another, or even allow the friend and family of the patients to suggest the diagnosis and proceed to give treatment without further examination. The rare and exceptional cases are too often the result of ignorance, and the man who reports a large number of usual or unusual cases seen in a short time can often be put down as a slovenly observer or a member of the Ananias club.

It is often the young physician who sees the wonderful case, and lucky is the older one if he can escape hearing about the wonderful cases as depicted by his younger colleagues on the street cars or wherever a patient and long-suffering listener can be found. It is hard not to be influenced by the views of others, and it is natural for one physician to ask what his predecessor said in regard to this or that case. In a consultation often the consultant will fall into the diagnosis of his colleague, and that without any intention.

It is well to make the diagnosis carefully, and try as far as possible to be free from the influences of other physicians and of the friends of the family.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending June 17, 1899:

Diseases.	Cases Reported.	Deaths.
Smallpox.....	..	..
Pneumonia .....	..	6
Phthisis Pulmonalis.....	..	16
Measles	22	..
Whooping Cough.....	3	..
Pseudo-Membranous Croup and Diphtheria. }	17	2
Mumps.....	1	..
Scarlet Fever.....	2	..
Varioloid .....	..	..
Varicella	4	..
Typhoid Fever.....	5	2
La Grippe.....	..	1

The plague is said to have appeared in Paris.

The plague is reported to be very severe in the East.

The Hospital for Ruptured and Crippled has moved to its country home at Blue Ridge Summit, Pa.

Dr. W. F. Brunner, chief of the United States Marine Hospital staff at Havana, has been made health officer of Savannah.

The surgeons of the Baltimore & Ohio Railroad met at the hall of the Faculty last Tuesday and Wednesday and read papers and elected officers.

Dr. Nathan Pratt, a prominent physician of Milford, Del., died last Sunday, aged sixty-six. He received his degree from the University of Pennsylvania in 1860.

A State bacteriological and pathological laboratory has been established for Delaware. Professor Chester, State bacteriologist, has been appointed director.

Dr. E. N. Brush, superintendent of the Sheppard and Enoch Pratt Hospital, has been elected professor of mental diseases at the College of Physicians and Surgeons.

As noted not long ago, there were thirty-three graduates at the Johns Hopkins Medical School. Of these, two were women. This is very large for the third class that ever received medical degrees at that institution.

Dr. James Ward Scott, Jr., died last week at Belair, aged fifty-four years. Dr. Scott was born in Missouri and received his degree at the University of Maryland in 1866. At one time he lived in Baltimore.

At the Maryland Hospital for the Insane Dr. J. Percy Wade was re-elected superintendent; Dr. Robert Garrett, first assistant; Dr. Joseph K. Shower, clinical assistant; Dr. Cornelius Deweese, second assistant, and Dr. Jessie C. Coggin, third assistant.

Dr. J. C. Webster of McGill University, and formerly of the University of Edinburgh, has been appointed to the chair of obstetrics and gynecology in Rush Medical College, which will form part of the Chicago University. This is the chair lately refused by Dr. John Whitridge Williams of Baltimore.

Two societies have been incorporated in Baltimore recently—one to furnish medical and surgical attendance to its members and the other to maintain a hospital and transact an undertaking business. It is a sort of medical trust and probably like the clubs against which English physicians have been fighting for so long.

The following officers of the American Præ-tological Society were elected: President, Dr. Joseph M. Mathews, Louisville, Ky., the retiring president of the American Medical Association; vice-president, Dr. James P. Tuttle, New York city; secretary-treasurer, Dr. William M. Beach, Pittsburg; board of counsellors, Drs. Samuel T. Earle, Baltimore, Md.; A. Bennett Cooke, Nashville, Tenn., and J. R. Pennington, Chicago. The next annual meeting of the society will be held in Washington, D. C., in May, 1900.

The following officers of the American Medical Association were elected: President, Dr. W. W. Keen, Philadelphia; vice-presidents, Dr. C. A. Wheaton, St. Paul; Dr. E. Ferguson, New York city; Dr. G. M. Allen, Liberty, Mo.; Dr. W. E. D. Middleton, Davenport, Iowa; secretary, Dr. G. H. Simmons, Chicago; treasurer, Dr. H. P. Newman, Chicago; assistant secretary, Dr. J. A. Jay, Atlantic City, N. J.; librarian, Dr. W. G. Webster, Chicago; chairman committee of arrangements, Dr. Philip Marvel, Atlantic City, N. J. Atlantic City, N. J., was chosen as the place of the next meeting.

Book Reviews.

NERVOUS AND MENTAL DISEASES.—By Archibald Church, M.D., Professor of Neurology, Northwestern University Medical School, Chicago, etc., and Frederick Peterson, M.D., Professor of Mental Diseases, Woman's Medical College, New York, etc. Philadelphia: W. B. Saunders. For sale by the Medical Standard Book Co., Baltimore.

This book is not exactly the conjoint work of the two authors, but the section on neurology has been prepared entirely by Dr. Church, and Dr. Peterson contributes that on mental diseases. Part I deals with the examination of the patient, and offers many valuable suggestions. The other sections treat of the diseases of the meninges, cranial nerves, brain, spinal cord and the neuroses. The clinical descriptions are clear and concise, and there are many excellent illustrations. As a book intended mainly for students more attention should have been devoted to treatment. There is rather too great a tendency in the recent textbooks toward indoctrinating the student with therapeutic nihilism. The article on hysteria is excellent, and the author very properly condemns the indiscriminate use of hypnotism. The article on epilepsy is rather brief, and more should have been said about the general management and treatment of this affection.

The last 200 pages of the volume are devoted to mental diseases. Dr. Peterson has succeeded in presenting this subject in a concise, clear and intelligible manner. It is just about what the student and general practitioner needs to know. The only criticism that can be made is that there should have been a brief statement as to the relations of the insane to the law.

A POCKET MEDICAL DICTIONARY. Giving the Pronunciation and Definition of the Principal Words Used in Medicine and the Collateral Sciences, etc. By George M. Gould, A.M., M.D. A new edition, entirely rewritten and enlarged, including over twenty-one thousand words. Pp. 9-530. Price \$1. Philadelphia: P. Blakiston's Son & Co. 1898.

This is a new edition of a very useful work which has become known through the medium of Dr. Gould's larger dictionary. As it is a condensed edition of the unabridged one, and both have been noticed before, further criticism is not necessary. The spelling is according to the author's own ideas.

REPRINTS, ETC., RECEIVED.

Report of the Kensington Hospital for Women of Philadelphia. 1898.

First Annual Report of the University Hospital of Kansas City, Mo. 1898.

The Episcopal Eye, Ear and Throat Hospital of Washington, D. C. 1898.

The Antitoxine Treatment of Diphtheria. H. K. Mulford Co., Philadelphia and Chicago.

Ninth Annual Report of the Lutheran Eye, Ear and Throat Infirmary of Washington, D. C. 1899.

The 101st Annual Report of the Board of Managers of the Maryland Hospital for the Insane. 1898.

Bezold's Mastoiditis; Report of a Case. By M. D. Lederman, M.D. Reprint from the *New York Polyclinic*.

Twenty-first Annual Report of the Presbyterian Eye, Ear and Throat Charity Hospital of Baltimore. 1898.

Teaching Obstetrics. By J. W. Williams, M.D. Reprint from the *Bulletin of the American Academy of Medicine*.

A Year's Work in the Preventive Treatment of Rabies. By John Ruhräh, M.D. Reprint from the *Philadelphia Medical Journal*.

Some Observations of General Interest Regarding the Course and Management of Cataract. By J. H. Woodward, B.S., M.D.

The Bacteria of the Vagina and Their Practical Significance. By J. Whitridge Williams, M.D. Reprint from the *Transactions of the American Gynecological Society*.

Tumors of the Naso-Pharynx; Their Treatment Through the Natural Orifices. By John R. Winslow, B.A., M.D. Reprint from the *Journal of Eye, Ear and Throat Diseases*.

Furunculosis of the External Auditory Meatus, Followed by Suppurative Otitis Media, with Mastoid Involvement and Operation. By M. D. Lederman, M.D. Reprint from the *Laryngoscope*.

The Cause of the Conflicting Statements Concerning the Bacterial Contents of the Vaginal Secretion of the Pregnant Woman. By J. Whitridge Williams, M.D. Reprint from the *American Journal of Obstetrics*.

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